

Lawrence Livermore National Laboratory
Energy and Environment Directorate Publications
(January 1, 2001, through December 31, 2001)

Peer-reviewed and Published

1. Barnard, P.L., L.A. Owen, M.C. Sharma, and R.C. Finkel (2001). "Natural and human-induced landsliding in the Garhwal Himalaya of northern India." *Geomorphology*, **40**(1–2):21–35.
2. Barrie, L.A., W.R. Leitch, U. Lohmann, P. Kasibhatla, G.J. Roelofs, J. Wilson, F. McGovern, C. Benkovitz, M.A. Melieres, K. Law, J. Prospero, M. Kritz, D.J. Bergmann, C. Bridgeman, M. Chin, J. Christensen, R. Easter, J. Feichter, C. Land, A. Jeuken, E. Kjellstrom, D. Koch and P. Rasch (2001). "A Comparison of Large-scale Atmospheric Sulphate Aerosol Models (COSAM): Overview and Highlights." *TELLUS SERIES B-CHEMICAL AND PHYSICAL METEOROLOGY*, **53**(5):615–645.
3. Bench, G., T. Carlsen, P. Grant, J. Woollett, Jr., R. Martinelli, J. Lewis and K. Divine (2001). "Olfactory Bulb Uptake and Determination of Biotransfer Factors in the California Ground Squirrel (*Spermophilus beecheyi*) Exposed to Manganese and Cadmium in Environmental Habitats." *Environmental Science & Technology*, **35**:270–277, UCRL-JC-141046.
4. Bierman, P.R. and M. Caffee (2001). "Slow Rates of Rock Surface Erosion and Sediment Production Across the Namib Desert and Escarpment, Southern Africa." *American Journal of Sciences*, **301**(4-5):326–358.
5. Blackmon, M., B. Boville, F. Bryan, R. Dickinson, P. Gent, J. Kiehl, R. Moritz, D. Randall, J. Shukla, S. Solomon, G. Bonan, S. Doney, I. Fung, J. Hack, E. Hunke, J. Hurrell, J. Kutzbach, J. Meehl, B. Otto-Bliesner, R. Saravanan, E.K. Schneider, L. Sloan, M. Spall, K. Taylor, J. Tribbia and W. Washington (2001). "The Community Climate System Model." *Bull. Amer. Meteor. Soc.*, **82**:2357–2376.
6. Bogen, K.T., L. Enns, L.C. Hall, G.A. Keating, M. Weinfeld, G. Murphy, R. Wu and F.N. Pantaleakos (2001). "Gel Microdrop Flow Cytometry Assay for Low-Dose Studies of Chemical and Radiation Cytotoxicity." *Toxicology*, **160**:5–10, UCRL-JC-141798.
7. Bogen, K.T. and G.A. Keating (2001). "U.S. Dietary Exposures to Heterocyclic Amines." *J. Exposure Anal. Environ. Epidemiol.*, **11**:155–168, UCRL-JC-140566.
8. Bogen, K.T. (2001). "Biologically Based Prediction of Empirical Nonlinearity in Lung Cancer Risk vs. Residential/Occupational Radon Exposure." *Human Ecol. Risk Assess.*, **7**(4):811–827, UCRL-JC-132063.
9. Bourcier, W.L. and C. Bruton (2001). "Producing Commercial silicas from Geothermal Fluids." *Geothermal Bulletin*, **29**(6), UCRL-JC-145336.

10. Briner, J.P., T.W. Swanson and M. Caffee (2001). "Late Pleistocene Cosmogenic Cl-36 Glacial Chronology of the Southwestern Ahklun Mountains, Alaska." *Quaternary Research*, **56**(2):148–154,
11. Caffee, M.W. and K. Nishiizumi (2001). "Exposure History of Separated Phases from the Kapoeta Meteorite." *Meteoritics & Planetary Science*, **36**(3):429–437.
12. Carlsen, T., L. Peterson, B. Ulsh, C. Werner, K. Purvis and A. Sharber (2001). "Radionuclide Contamination at Kazakhstan's Semipalatinsk Test Site: Implications on Human and Ecological Health." *Human and Ecological Risk Assessment*, **7**(4):943–955.
13. Clapp, E.M., P.R. Bierman, K.K. Nichols, M. Pavich and M.W. Caffee (2001). "Rates of Sediment Supply to Arroyos from Upland Erosion Determined using in Situ-Produced Cosmogenic ^{10}Be and ^{26}Al ." *Quarternary Research*, **55**(2):235–245.
14. Clark, B.M., N.F. Mangelson, L.L. St. Clair, L.B. Rees, P.G. Grant and G.S. Bench (2001). "Characterization of Mycobiont Adaptations in the Foliose Lichen *Xanthoparmelia Chlorochroa* (Parmeliaceae)." *American Journal of Botany*, **88**(10):1742–1749, UCRL-JC-141045.
15. Connell, P.S., D.B. Considine, A.R. Douglass, D.E. Kinnison and D.A. Rotman (2001). "A Polar Stratospheric Cloud Parameterization for the Three Dimensional Model of the Global Modeling Initiative and Its Response to Stratospheric Aircraft Emissions." *Geophysical Research-Atmospheres*, **105**(D3):3955–3973, UCRL-JC-144656.
16. Cullander, C., P.G. Grant and G. Bench (2001). "Development of a Low-Metal Adhesive Tape to Detect and Localize Metals In or On the Stratum Corneum at Parts Per Million Levels." *Skin Pharmacol Appl*, **14**(Suppl. 1):46–51, UCRL-JC-147404.
17. Cullen, J. and K.T. Bogen (2001). "Historical Residential Coal Use and Female Lung Cancer Mortality." *Human Ecol. Risk Asses.*, **7**:369–385, UCRL-JC-131635-Rev-1.
18. Druffel, E.R.M., S. Griffin, T.P. Guilderson and et al. (2001). "Changes of Subtropical North Pacific Radiocarbon and Correlation with Climate Variability." *RADIOCARBON*, **43**(1):15–25, UCRL-JC-147495.
19. Duffy, P., C. Doutriaux, I. Fodor and B. Santer (2001). "Effect of Missing Data on Estimates of Near-Surface Temperature Change Since 1900." *JOURNAL OF CLIMATE*, **14**(13):2809–2814.
20. Duffy, P.B., M. Eby and A.J. Weaver (2001). "Climate Model Simulations of Effects of Increased Atmospheric CO₂ and Loss of Sea Ice on Ocean Salinity and Tracer Uptake." *JOURNAL OF CLIMATE*, **14**(4):520–532.
21. Flowers, D., S. Aceves, C. Westbrook, J. Smith and R. Dibble (2001). "Detailed Chemical Kinetic Simulation of Natural Gas HCCI Combustion: Gas Composition Effects and Investigation of Control Strategies." *Journal of Engineering for Gas Turbines and Power*, **123**: 433–439, UCRL-JC-141390.
22. Fu, J., L. Paduano, J.A. Rard, J.G. Albright and D.G. Miller (2001). "Mutual Diffusion Coefficients and Densities at 298.15 K of Aqueous Mixtures of NaCl and Na₂SO₄ at High Concentrations with NaCl Solute Fractions of 0.9000." *Journal of Chemical and Engineering Data*, **46**(3):601–608, UCRL-JC-141158.

23. Glassley, W.E., A.M. Simmons and J.R. Kercher (2001). "Mineralogical Heterogeneity in Fractured, Porous Media and its representation in Reactive Transport Models." *Applied Geochemistry*, **17**(6):699–708, UCRL-JC-143641.
24. Govindasamy, B., K.E. Taylor, P.B. Duffy, B.D. Santer, A.S. Grossman and K.E. Grant (2001). "Limitations of the Equivalent CO₂ Approximation in Climate Change Simulations." *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, **106**(D19):22593–22603.
25. Govindasamy, B., P. Duffy and K. Caldeira (2001). "Land use Changes and Northern Hemisphere Cooling." *Geophysical Research Letters*, **28**(2):291–294.
26. Graf, T., M.W. Caffee, K. Marti, K. Nishiizumi and K.V. Ponganis (2001). "Dating Collisional Events: 36Cl-36Ar Exposure Ages of H-Chondritic Metals." *ICARUS*, **150**(1):181–188, UCRL-JC-136732-REV-2.
27. Granger, D.E., C.S. Riebe, J.W. Kirchner and R.C. Finkel (2001). "Modulation of Erosion on Steep Granitic Slopes by Boulder Armoring, as Revealed by Cosmogenic Al-26 and Be-10." *Earth and Planetary Science Letters*, **186**(2):269–281.
28. Hodell, D.A., M. Brenner, J.H. Curtis and T. Guilderson (2001). "Solar Forcing of Drought Frequency in the Maya Lowlands." *SCIENCE*, **292**(5520):1367–1370, UCRL-JC-142825.
29. Johnson, V.M. and L.L. Rogers (2001). "Applying Soft Computing Methods to Improve the Computational Tractability of a Subsurface Simulation-Optimization Problem." *Journal of Petroleum Science and Engineering*, **29**(3-4):153–175.
30. Jordan, G., S.R. Higgins, C.M. Eggleston, K. Knauss and W.W. Schmahl (2001). "Dissolution kinetics of magnesite in acidic aqueous solution, a hydrothermal atomic force microscopy (HAFM) study: Step orientation and kink dynamics." *Geochimica Et Cosmochimica Acta*, **65**(23):4257–4266.
31. Kansa, E.J. (2001). "A time-dependent buoyant puff model for explosive sources." *Int. J. Appl. Sci. Comput.*, **8**(3):171–226.
32. Keating, G.A. and K.T. Bogen (2001). "Methods to Estimate Heterocyclic Amine Concentrations in Cooked Meats in the U.S. Diet." *Fd. Chem. Toxicol.*, **39**:29–43, UCRL-JC-137806.
33. Kercher, J.R. and J.Q. Chambers (2001). "Parameter Estimation for a Global Model of Terrestrial Biogeochemical Cycling by an Iterative Method." *Ecological Modelling*, **139**: 137–175, UCRL-JC-134400 Rev. 2.
34. Kinnison, D.E., P.S. Connell, J.M. Rodriguez, D.A. Rotman, D.B. Considine, J. Tannahill, R. Ramaroson, P.J. Rasch, A.R. Douglass, S.L. Baughcum, L. Coy, D.W. Waugh, S.R. Kawa and M.J. Prather (2001). "The Global Modeling Initiative Assessment Model: Application to High-Speed Civil Transport Perturbation." *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, **106**(D2):1693–1711, UCRL-JC-139756.
35. Knauss, K.G., M.J. Dibley, W.L. Bourcier and H.F. Shaw (2001). "Ti(IV) Hydrolysis Constants Derived From Rutile Solubility Measurements Made From 100° to 300°C." *Applied Geochemistry*, **16**(9-10):1115–1128, UCRL-JC-135165-ABS.

36. Kumar, S., S.G. Wesnousky, T.K. Rockwell, D. Ragona, V.C. Thakur and G.G. Seitz (2001). "Earthquake Recurrence and Rupture Dynamics of Himalayan Frontal Thrust, India." *SCIENCE*, **294**(5550):2328–2331, UCRL-JC-146682.
37. Latif, M. and K.R. Sperber (2001). "ENSIP: The El Nino Simulation Intercomparison Project." *Climate Dynamics*, **18**: 255–276, UCRL-JC-139015.
38. Liu, P., W.M. Washington, G.A. Meehl, G.X. Wu and G.L. Potter (2001). "Historical and Future Trends of the Sahara Desert." *GEOPHYSICAL RESEARCH LETTERS*, **28**(14):2683–2686.
39. Lohmann, U., W.R. Leitch, L. Barrie, K. Law, Y. Yi, D.J. Bergmann, C. Bridgeman, M. Chin, J. Christensen, R. Easter, J. Feichter, A. Jeuken, E. Kjellstrom, D. Koch, P. Rasch and G.J. Roelofs (2001). "Vertical Distributions of Sulfur Species Simulated by Large Scale Atmospheric Models in COSAM: Comparison with Observations." *TELLUS SERIES B-CHEMICAL AND PHYSICAL METEOROLOGY*, **53**(5):646–672.
40. Lozhkin, A.V., P.M. Anderson, S.L. Vartanyan, T.A. Brown, B.V. Belya and A.N. Kotov (2001). "Late Quaternary Paleoenvironments and Modern Pollen Data from Wrangel Island (Northern Chukotka)." *Quaternary Science Reviews*, **20**(1-3):217–233, UCRL-JC-130878.
41. Marian, J., B.D. Wirth, J.M. Perlado, G.R. Odette and T. Diaz de la Rubia (2001). "Dynamics of Self-Interstitial Migration in Fe-Cu Alloys." *Physical Review B*, **094303**/1, UCRL-JC-141715 Rev. 1.
42. Marriott, R.A., A.W. Hakin and J.A. Rard (2001). "Apparent Molar Heat Capacities and Apparent Molar Volumes of $\text{Y}_2(\text{SO}_4)_3$ (aq), $\text{La}_2(\text{SO}_4)_3$ (aq), $\text{Pr}_2(\text{SO}_4)_3$ (aq), $\text{Nd}_2(\text{SO}_4)_3$ (aq), $\text{Eu}_2(\text{SO}_4)_3$ (aq), $\text{Dy}_2(\text{SO}_4)_3$ (aq), $\text{Ho}_2(\text{SO}_4)_3$ (aq), and $\text{Lu}_2(\text{SO}_4)_3$ (aq) at $T = 298.25\text{ K}$ and $p = 0.1\text{ MPa}.$ " *Journal of Chemical Thermodynamics*, **33**(6):643-687, UCRL-JC-139601.
43. McCarthy, M.C., P. Connell and K.A. Boering (2001). "Isotopic Fractionation of Methane in the Stratosphere and its Effect on Free Tropospheric Isotopic Compositions." *GEOPHYSICAL RESEARCH LETTERS*, **28**(19):3657–3660.
44. Mitchell, S.G., A. Matmon, P.R. Bierman, Y. Enzel, M. Caffee and D. Rizzo (2001). "Displacement History of a Limestone Normal Fault Scarp, Northern Israel, from Cosmogenic Cl-36." *Journal of Geophysical Research - Solid Earth*, **106**(B3):4247–4264.
45. Moore, W.S., T.Z. Liu, W.S. Broecker, R.C. Finkel and A. Wright (2001). "Factors influencing Be-7 accumulation on rock varnish." *Geophysical Research Letters*, **28**(23):4475–4478.
46. Muramatsu, Y., T. Hamilton, S. Uchida, K. Tagami, S. Yoshida and W. Robison (2001). "Measurement of $^{240}\text{Pu}/^{239}\text{Pu}$ Isotopic Ratios in Soils from the Marshall Islands using ICP-MS." *Science of the Total Environment*, **278**: 151–159, UCRL-JC-141066.
47. Noshkin, V.E., W.L. Robison, J.A. Brunk and T.A. Jokela (2001). "An Evaluation of Activated Bismuth Isotopes in Environmental Samples from the Former Western Pacific Proving Grounds." *Journal of Radioanalytical and Nuclear Chemistry*, **248**(3):741–750, UCRL-JC-135850.
48. Odette, G.R., B.D. Wirth, D.J. Bacon and N.M. Ghoneim (2001). "Multiscale-Multiphysics Modeling of Radiation-Damaged Materials: Embrittlement of Pressure Vessel Steels." *Material Research Society Bulletin*, **26**(176), UCRL-JC-142559.

49. Owen, L.A., L. Gaultieri, R.C. Finkel, M.W. Caffee, D.I. Benn and M. Sharma (2001). "Cosmogenic Radionuclide Dating of Glacial Landforms in the Lahul Himalaya, Northern India: Constraining the Timing of Late Quaternary Glaciation." *Journal of Quaternary Science*, **16**(6):555–563, UCRL-JC-139355.
50. Pawson, S., L. Takacs, A. Molod, S. Nebuda, M. Chen, R. Rood, W.L. Read and M. Fiorino (2001). "The Tropical Upper Troposphere and Lower Stratosphere in the GEOS-2 GCM." *ADVANCES IN SPACE RESEARCH*, **27**(8):1457–1465.
51. Perg, L.A., R.S. Anderson and R.C. Finkel (2001). "Use of a new Be10-and Al-26 inventory method to date marine terraces, Santa Cruz, California, USA." *Geology*, **29**(10):879–882.
52. Pickles, W., P. Kasameyer, B. Martini, D. Potts and E. Silver (2001). "Geobotanical Remote Sensing for Geothermal Exploration." *Geothermal Resources Council Transactions*, **25**: 307.
53. Post, R. (2001). "The Kinetic Stabilizer: A Simpler Tandem-Mirror Configuration?" *Fusion Technology*, **39**(25), UCRL-JC-141533.
54. Ramirez, A. and W. Daily (2001). "Electrical Imaging at the Large Block Test - Yucca Mountain, Nevada." *Journal of Applied Geophysics*, **46**(2):85–100, UCRL-JC-140906.
55. Regnier, P. and C.I. Steefel (2001). "High Resolution Estimate of the inorganic Nitrogen Flux from the Scheldt Estuary to the Coastal North Sea during a Nitrogen-Limited Algal Bloom, Spring 1995." *Geochimica et Cosmochimica Acta*, **63**(9):1359–1374, UCRL-JC-142637.
56. Riebe, C.S., J.W. Kirchner, D.E. Granger and R.C. Finkel (2001). "Strong Tectonic and Weak Climatic Control of Long-Term Chemical Weathering Rates." *Geology*, **29**(6):511–514.
57. Riebe, C.S., J.W. Kirchner, D.E. Granger and R.C. Finkel (2001). "Minimal Climatic Control on erosion Rates in the Sierra Nevada, California." *Geology*, **29**(5):447–450.
58. Roberts, J., A. Duba, B. Bonner and P. Kasameyer (2001). "The Effects of Capillarity on Electrical Resistivity During Boiling in Metashale from Scientific Corehole SB-15-D, The Geysers, California, USA." *Geothermics*, **30**: 235–254, UCRL-JC-127468 Rev. 1.
59. Roberts, J., A. Ramirez, S. Carlson, W. Ralph, W. Daily and B. Bonner (2001). "Laboratory and Field Measurements of Electrical Resistivity to Determine Saturation and Detect Fractures in a Heated Rock Mass." *Geothermal Resources Council Transactions*, **25**: 681–686, UCRL-JC-143220.
60. Roberts, J.J. (2001). "Electrical Properties of Microporous Rock as a Function of Saturation and Temperature." *Journal of Applied Physics*, **91**(3):1687–1694, UCRL-JC-144782.
61. Roelofs, G.J., P. Kasibhatla, L. Barrie, D.J. Bergmann, C. Bridgeman, M. Chin, J. Christensen, R. Easter, J. Feichter, A. Jeuken, E. Kjellstrom, D. Koch, C. Land, U. Lohmann and P. Rasch (2001). "Analysis of Regional Budgets of Sulfur Species Modeled for the COSAM Exercise." *TELLUS SERIES B-CHEMICAL AND PHYSICAL METEOROLOGY*, **53**(5):673–694.

62. Rosenberg, N.D., W.L. Bourcier and L.-S.R.I. Browning, San Antonio, Texas (2001). "Modeling Aqueous Alteration of CM Carbonaceous Chondrites." *Meteoritics & Planetary Science*, **36**(2):239–244, UCRL-JC-143917.
63. Rotman, D.A., J.R. Tannahill, D.E. Kinnison, P.S. Connell, D.J. Bergmann, D. Proctor, J.M. Rodriguez, S.J. Lin, R.B. Rood, M.J. Prather, P.J. Rasch, D.B. Considine, R. Ramaroson and S.R. Kawa (2001). "Global Modeling Initiative Assessment Model: Model Description, Integration, and Testing of the Transport Shell." *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, **106**(D2):1669–1691, UCRL-JC-137286.
64. Sahai, V. and S. Aceves (2001). "Determination of Heat Transfer During Gear Blank Quenching." *Heat Transfer Engineering*, **22**(4):56–66.
65. Santer, B.D., T.M.L. Wigley, C. Doutriaux, J.S. Boyle, J.E. Hansen, P.D. Jones, G.A. Meehl, E. Roeckner, S. Sengupta and K.E. Taylor (2001). "Accounting for the Effects of Volcanoes and ENSO in Comparisons of Modeled and Observed Temperature Trends." *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, **106**(D22):28033–28059.
66. Sperber, K., C. Brankovic, M. Deque, C. Frederiksen, R. Graham, A. Kitoh, C. Kobayashi, T. Palmer, K. Puri, W. Tennant and E. Volodin (2001). "Dynamical Seasonal Predictability of the Asian Summer Monsoon." *MONTHLY WEATHER REVIEW*, **129**(9):2226–2248, UCRL-JC-134878 Rev.1.
67. Sun, D.-Z., C. Covey and R.S. Lindzen (2001). "Vertical Correlations of Water Vapor in GCMs." *Geophysical Research Letters*, **28**: 259–262, UCRL-JC-139325.
68. Swanson, T.W. and M. Caffee (2001). "Determination Cl-11 Production Rates derived from the Well-Dated Deglaciation Surfaces of Whidbey and Fidalgo Islands, Washington." *Quaternary Research*, **56**(3):366–382.
69. Taylor, K.E. (2001). "Summarizing Multiple Aspects Of Model Performance In A Single Diagram." *J. Geophys. Res.*, **106**: 7183–7192.
70. Trenberth, K.E., D.P. Stepaniak, J.W. Hurrell and M. Fiorino (2001). "Quality of Reanalyses in the Tropics." *JOURNAL OF CLIMATE*, **14**(7):1499–1510.
71. Ullom, J.N., M. Frank, E.E. Gard, J.M. Horn, S.E. Labov, K. Langry, F. Magnotta, K.A. Stanion, C.A. Hack and W.H. Benner (2001). "Discrimination Between Bacterial Spare Types using Time-of-Flight Mass Spectrometry and Matrix Free Infrared Laser Desorption and Ionization." *Analytical Chemistry*, **73**(10):2331–2337.
72. Vogel, J.S., P.G. Grant, B.A. Buchholz, K. Dingley and K.W. Turteltaub (2001). "Attomole Quantitation of Protein Separations with Accelerator Mass Spectrometry." *Electrophoresis*, **22**(10):2037–2045, UCRL-JC-141801.
73. Wirth, B.D., M.J. Caturla, T. Diaz de la Rubia, T. Khraishi and H. Zbib (2001). "Mechanical Property Degradation in Irradiated Materials: A Multiscale Modeling Approach." *Nuclear Instruments and Methods B*, **180**(23), UCRL-JC-139287.
74. Yabusaki, S.B., K. Cantrell, B. Sass and C.I. Steefel (2001). "Multicomponent Reactive Transport in an in Situ Zero-Valent Iron Cell." *Environmental Science & Technology*, **35**(7):1493–1503.
75. Zehfuss, P.H., P.R. Bierman, A.R. Gillespie, R.M. Burke and M. Caffee (2001). "Slip Rates on the Earth springs Fault, Owens Valley, California, Deduced from Cosmogenic Be-

- 10 and Al-26 and Soil Development on Fan Surfaces." *Geological Society of America Bulletin*, **113**(2):241–255.
76. Zhang, M.H., J.L. Lin, R.T. Cederwall, J.J. Yio and X.C. Xie (2001). "Objective Analysis of ARM IOP Data: Method and Sensitivity." *Monthly Weather Review*, **129**: 295–311, UCRL-JC-134096.

Books and Book Sections

1. Berry, G. and A. Lamont (2001). "Carbonless Transportation and Energy Storage in Future Energy Systems." In *Innovative Energy Strategies for CO₂ Stabilization*, R. Watts, Ed., Cambridge, MA.
2. Covey, C. (2001). "Asteroids And Comets, Effects On Earth." In *Encyclopedia of Global Environmental Change*, M.C. MacCracken and J. Perry, Eds. John Wiley, Chichester, UK.
3. Covey, C. (2001). "Model Simulations Of Present And Historical Climates." In *Encyclopedia of Global Environmental Change, Vol. 1: The Earth System: Physical and Chemical Dimensions of Global Environmental Change*, M.C. MacCracken and J. Perry, Eds. John Wiley, Chichester, UK.
4. Gates, W.L. (2001). "Climate Change." In *Encyclopedia of Global Environmental Change, Vol. 1: The Earth System: Physical and Chemical Dimensions of Global Environmental Change*, M.C. MacCracken and J. Perry, Eds. John Wiley, Chichester, UK.
5. Gates, W.L. (2001). "WGNE." In *Encyclopedia of Global Environmental Change, Vol. 1: The Earth System: Physical and Chemical Dimensions of Global Environmental Change*, M.C. MacCracken and J. Perry, Eds. John Wiley, Chichester, UK.
6. Gates, W.L. (2001). "AMIP." In *Encyclopedia of Global Environmental Change, Vol. 1: The Earth System: Physical and Chemical Dimensions of Global Environmental Change*, M.C. MacCracken and J. Perry, Eds. John Wiley, Chichester, UK.
7. Harrison, F.L. and J.P. Knezovich (2001). "Effects of Radiation on Aquatic and Terrestrial Organisms." In *Radioecology: Radioactivity and Ecosystems*, R. Kirchmann and E. Van der Stricht, Eds. International Union of Radioecology, Leige, Belgium, Ch. V: 317–375, UCRL-JC-143193.
8. Levine, L., L. Kubin and R. Becker, Eds. (2001). *Dislocations 2000, An International Conference on the Fundamentals of Plastic Deformation*, Elsevier Publishers.

Technical and Programmatic Reports

1. Anderson, B. (2001). "Service Life of Packaging for Transportation Radioactive Material." UCRL-ID-145768.
2. Armantrout, G. and C.C. Herman (2001). "Activation and Validation Test Plan for the PUCTF with Surrogates in B241." UCRL-ID-143766.
3. Armantrout, G. (2001). "Recommended Ceramification Batch Size for Reduced Plant Size." UCRL-ID-143767.

4. Armantrout, G. (2001). "Completion of PIP Milestone 6.2.3/FY00/a." UCRL-ID-143770.
5. Armantrout, G. and J.C. Marra (2001). "Plutonium Immobilization Project Ceramic Prototype Test Facility Conceptual Design Layout (FY00 Milestone 6.2.5)." UCRL-ID-143786.
6. Baker, M.S., R.L. Baskett and J.S. Ellis (2001). "Exploring ARAC Support of U.S. Coast Guard Planning and Response Capability." UCRL-ID-144788.
7. Berge, P.A., B.P. Bonner, J.J. Roberts, D. Wildenschild, C.M. AracneRuddle, J.G. Berryman, H. Bertete-Aguirre, C.O. Boro and E.D. Carlberg (2001). "FY2001 Annual Report for EMSP Project #70108: Effects of Fluid Distribution on Measured Geophysical Properties for Partially Saturated, Shallow Subsurface Conditions." UCRL-ID-144288.
8. Bogen, K.T. (2001). "Methods for Addressing Uncertainty and Variability to Characterize Potential Health Risk from Trichloroethylene-Contaminated Ground Water at Beale Air Force Base in California: Integration of Uncertainty and Variability in Pharmacokinetics and Dose-Response." UCRL-ID-135978 Rev1. LLNL.
9. Bogen, K.T. (2001). "RiskQ 4.0: An Interactive Approach to Probability, Uncertainty, and Statistics for Use with *Mathematica*." UCRL-CODE-2001-031.
10. Brown, N. (2001). "Thermoelectric Power Conversion Systems for use with Liquid Metal Cooled Nuclear Reactors." UCRL-ID-145138.
11. Brown, N. (2001). "Evaluation of the Corrosion Characteristics of Heavy Metal Reactor Coolants." UCRL-ID-14491.
12. Buchholz, B.A. and C.J. Mueller (2001). "Isotopic Tracing of Fuel Components in Particulate Emissions from Diesel Engines using Accelerator Mass Spectrometry (AMS)." UCRL-ID-144771. Lawrence Livermore National Laboratory.
13. Caldeira, K., M.E. Wickett, G. Alendahl, C. Goyet and P.G. Brewer (2001). "The Role of Hydrate Films in the Effectiveness of Direct CO₂ Injection as an Ocean Carbon Sequestration Strategy." UCRL-JC-141267.
14. Carlsen, T., E. Borglin, M. Hoffman and R. Garza (2001). "Water Quality Testing After the Use of Primacord Detonation Chord in Water from Lake Davis." UCRL-AR-145818. California Department of Fish and Game.
15. Carlsen, T., E. Espeland and A. Smith (2001). "Rare Plant Restoration and Monitoring at Lawrence Livermore National Laboratory Site 300 Project Progress Report Fiscal Year 2000 October 1999-September 2000." UCRL-ID-142371.
16. Carrigan, C.R. (2001). "The Dynamics of Vadose Zone Transport: A Field and Modeling Study using the Vadose Zone Observatory." Project: 70149, UCRL-ID-142481. Lawrence Livermore National Laboratory.
17. Carrigan, C.R., S.A. Martins, A.L. Ramirez, W.D. Daily, G.B. Hudson, B. Ekwurzel and D. Ralston (2001). "Characterization of Contaminant Transport by Gravity, Capillarity and Barometric Pumping in Heterogeneous Vadose Zones." UCRL-ID-142784.
18. Christensen, D.C., J.-S. Choi, A.A. DiSabatino and B.D. Wirth (2001). "Laboratory Directed Research and Development (LDRD) on Advanced Nuclear Fuel Design in the Future Nuclear Energy Market." UCRL-ID-145951.

19. Coatsworth, M. (2001). "Console Computer-Based Training Functional specification." UCRL-ID-144989.
20. Curran, H.J., E.M. Fisher, P.-A. Glaude, N.M. Marinov, W.J. Pitz, C.K. Westbrook, D.W. Layton, P.F. Flynn, R.P. Durrett, A.O. zur Loya, O.C. Akinyemi and F.L. Dryer (2001). "Detailed Chemical Kinetic Modeling of Diesel Combustion with Oxygenated Fuels." SAE #2001-01-0653, UCRL-JC-135216 Rev. 2. Society of Automotive Engineers, Inc.
21. Daniels, J.I., M.L. Davisson, B.E. Watkins and R. Martinelli (2001). "The Environmental, Health, Safety, and Effectiveness of Two Commercially Available Taggants Under Consideration for Incorporation Into Explosives." UCRL-ID-141964. Lawrence Livermore National Laboratory.
22. Davis, G. (2001). How to Create Areas and Access Lists—December 28, 2001 UCRL-MA-146052.
23. Davis, G. (2001). "RAP Description and Instruction Manual." UCRL-MA-109826, Rev. 2.
24. Davis, G. (2001). "RAP Application Guide." UCRL-MA-145813.
25. Davis, G. (2001). "Badge Office User Guide." UCRL-MA-114638, Rev. 3.
26. Davis, G. (2001). "VMS Window Application Guide." UCRL-MA-146538.
27. Davisson, M.I., A. Marchetti, M. Chiarappa-Zucca and D. Layton (2001). "Alkylate Measurements at Field Sites." UCRL-JC-143752. Lawrence Livermore National Laboratory.
28. Davisson, M.L. (2001). "Diagnostic Systems Approach to Watershed Management." LDRD FY98-ERD-046 Final Report, UCRL-ID-142554. Lawrence Livermore National Laboratory.
29. Decman, D. (2001). "HEU Transparency Implementation Program Portable NDA Data Report for CY2000." UCRL-ID-143982-00.
30. Dzakowic, G. (2001). "U.S. Monitoring Data Summary for the Highly Enriched Uranium Transparency Implementation Program." UCRL-ID-145117.
31. Foster, K.T., G. Sugiyama and J.S. Nasstrom (2001). "LLNL's Chemical and Biological Source Term Dispersion Modeling Data Base for the CBNP M&P Thrust." UCRL-ID-143281.
32. Foster, C.S. (2001). "NARAC Central System User's Guide." UCRL-MA-144393-DR.
33. Gallegos, G., R. Harrach, R. Berger, N. Bertoldo, P. Tate, S. Peterson, F. Gouveia, P. Althouse and J. Kelly (2001). "LLNL NESHPAs 2000 Annual Report." UCRL-ID-113867-01. Lawrence Livermore National Laboratory.
34. Glassley, W., J.J. Nitao, W. Grant, T.N. Boulos, M.O. Gokoffski, J.W. Johnson, J.R. Kercher, J.A. Levatin and C.I. Steefel (2001). "Performance Prediction for Large-Scale Nuclear Waste Repositories: Final Report." UCRL-ID-142866. Lawrence Livermore National Laboratory.
35. Glenn, L. (2001). "Simulating Marvel with the STUN Code." UCRL-ID-143993.

36. Grossman, A.S., C.F. Molenkamp and K.E. Grant (2001). "A Fast Running Test Bed Model to Evaluate Atmospheric Plume Source Properties II: Source Location Inversion Sensitivity Tests." UCRL-ID-144571 Pt. 2.
37. Grossman, A.S., C.F. Molenkamp and K.E. Grant (2001). "A Fast Running Test Bed Model to Evaluate Atmospheric Plume Source Properties I: Initial Test Scenario." UCRL-ID-144571 Pt 1.
38. Guilderson, T.P. (2001). "Determination of the Pre-bomb Southern (Antarctic) Ocean Radiocarbon in Organic Matter." 99-ERI-015, UCRL-ID-142828. LLNL.
39. Hadley, D. (2001). "Internal Review of the AFP Requirements Document - (UNCI)." UCRL-ID-145240.
40. Hall, C., L. Neher, L. Wilder, T. Carlsen, T. Ashwood, R. Washington-Allen and R. Efroymson (2001). "Data Collection Protocol for Developing Geographical Information Systems to Investigate and Manage Ecological Impacts at Petroleum Exploration and Production Sites." UCRL-ID-142371. Lawrence Livermore National Laboratory.
41. Halsey, W.G. and L.J. Jardine (2001). "Russian Spent Fuel Storage and Transportation to Support Termination of Civil Power Reactor Fuel Reprocessing at RT-1, A Technology Map." UCRL-ID-142749. LLNL.
42. Halsey, W., A.M. Wijesinghe, W.E. Glassley, W.L. Viani, W.L. Bourcier, T.J. Wolery, J.A. Rard and W.L. Clarke (2001). "LLNL JNC Repository Collaboration Final Report." UCRL-ID-144370.
43. Halsey, W. (2001). "Candidate Approaches for an Integrated Nuclear Waste Management Strategy—Scoping Evaluations." LA-UR-01-5572.
44. Halsey, W. (2001). "Generation IV Nuclear Energy Systems Assessment Criteria and Metrics for use in Screening for Potential." INEEL Report EC02-02.
45. Hamilton, T., S. Kehl, J. Brunk, F. Gouveia and W. Robison (2001). "In-Situ Gamma Spectrometric Measurements around the Service and Village Area on Rongelap Island." UCRL-ID-143680-Pt-1. LLNL.
46. Hamilton, T., S. Kehl, J. Brunk, F. Gouveia and W. Robison (2001). "Rongelap Resettlement Support—Preliminary Report Part I. *In-Situ* Gamma Spectrometric Measurements around the Service and Village Area on Rongelap Island." UCRL-ID-143680-Pt-1, UCRL-ID-143680-Pt-1. LLNL.
47. Hovingh, J. (2001). "Technical Review Report for the 5320 Package for the Shipment of Radioactive Material." UCRL-ID-145700-DR.
48. Hutchings, L. (2001). "Strong Ground Motion Estimates for the University of California, Santa Barbara Campus from a M=6.8 Earthquake on the North Channel Fault." UCRL-ID-183645.
49. Hutchings, L., P. Berge, P. Kasameyer, J. Wagoner, C. Hayek, J. Swenson and M. Flanagan (2001). "Association Among Source Parameters of Small Earthquakes, Q and Velocity Structure, Geology, and Production and Injection at The Geysers Geothermal Reservoir." UCRL-ID-143638.

50. Hutchings, L., P. Kasameyer, L. Long, T. McEvilly, R. Clymer and R. Uhrhammer (2001). “Deep Borehole Instrumentation Along San Francisco Bay Bridges - 2001.” UCRL-ID-133147-01.
51. Johnson, G.E. (2001). “International Electrotechnical Commission Standards Activities.” UCRL-MI-128913-Rev-1.
52. Johnson, G.E. (2001). “Comparison of IEC and IEEE Standards for Computer-Based Control Systems Important to Safety.” UCRL-ID-146642.
53. Johnson, D. (2001). “DRAFT Argus computer Based Training Functional Specification, Rev. A.” UCRL-ID-144990.
54. Jones, D. (2001). “Argus Badge office Gateway Functional Specification.” UCRL-ID-142192.
55. Kaiper, G. (2001). “U.S. Energy Flow—1999.” UCRL-ID-129990-99. LLNL.
56. Kashgarian, M. and T.P. Guilderson (2001). “Reconstructing Ocean Circulation Using Coral $\Delta^{14}\text{C}$ Time Series.” 98ER1002, UCRL-ID-142822. Lawrence Livermore National Laboratory.
57. Kercher, J.R., A.C. Hindmarsh and T. Kostova (2001). “Limit Cycles for a Class of Ordinary Differential Equations, Applied to Growth and Production Models.” UCRL-JC-144111. Lawrence Livermore National Laboratory.
58. Marchetti, A.A. (2001). “Environmental Transport and Fate of Alkylates.” UCRL-JC-143752. Lawrence Livermore National Laboratory.
59. McCallen, R., R. Greenman, D. Flowers, T. Dunn, J. Owens, G. Laskowski, F. Browand, A. Knight, M. Hammache, A. Leonard, M. Rubel, K. Salari, W. Rutledge, J. Ross, D. Satran, J. Heineck, W. Walker, D. Driver and B. Storms (2001). “March 2001 Working Group Meeting on Heavy Vehicle Aerodynamic Drag: Presentations and Summary of Comments and Conclusions.” UCRL-ID-143848.
60. Morris, J., I. Lomov and L. Glenn (2001). “Simulating Perforation Permeability Damage and Cleanup.” UCRL-ID-140438 Rev 1.
61. Myers, S. (2001). “Methods of Travel-Time Residual Declustering for the Knowledge Base Calibration and Integration Tool (KBCIT).” UCRL-ID-142529.
62. Nelson, N.N., P.O. Shell, S. Hendrickson, V. Sukhoruchkin, S. Antipov, E. Melkhov, N. Ponomarev-Stepnoi and N. Yurasov (2001). “Cooperative MPC&A Enhancements at Russian Navy Sites.” UCRL-JC-144199. Lawrence Livermore National Laboratory.
63. Newmark, R.L., R.D. Aines, J.J. Nitao, W.G. Hanley, S.F. Carle, A.L. Ramirez, S. Sengupta and D.B. Harris (2001). “Stochastic Engine: Direct Incorporation of Measurements Into Predictive Simulations.” UCRL-JC-145116. LLNL.
64. Nishiizumi, K., M.W. Caffee and J.R. Arnold (2001). “ ${}^{10}\text{Be}$ from the Sun.” UCRL-JC-143605. LLNL.
65. Nitao, J.J. (2001). “Some Examples of the Application and Validation of the NUFT Subsurface Flow and Transport Code.” UCRL-ID-145163. LLNL.
66. Nitao, J.J. and W.G. Hanley (2001). “Metropolis-Type Chains with Finite Memory and an Averaging Algorithm to Promote Mixing.” UCRL-ID-145680-DR. LLNL.

67. Nitao, J.J. and W.G. Hanley (2001). "Use of Averaged Densities to Promote Mixing of the Metropolis MCMC Algorithm." UCRL-ID-145681-DR. LLNL.
68. Peterson, R. (2001). "Remote Access Panel Requirements Document." UCRL-ID-145056.
69. Phillips, T.J. (2001). "On the Potential Predictability of Seasonal Land-Surface Climate." PCMDI Report No. 68, UCRL-ID-145701.
70. Ponganis, K.V., K. Marti, B. Lavielle, B. Spettel, V.F. Buckwald, K. Nishiizumi and M.W. Caffee (2001). "A New Lab Iron Meteorite From China." UCRL-ID-145419. University of California San Diego.
71. Radev, R. (2001). "Shielding Calculation for the BDMS UF6 Mass Flowmeter." UCRL-ID-145377.
72. Ramirez, A.L., W.D. Daily and B. Beck (2001). "Final Report FY2001: 200 East Vadose Test Site Hanford, Washington / Electrical Resistance Tomography." UCRL-ID-144655. LLNL.
73. Ramirez, A.L., W.D. Daily and A. Binley (2001). "Tank Leak Experiment at the Mock Tank Site, 200 East Area: Electrical Resistance Tomography-Preliminary Results." UCRL-ID-145662. LLNL.
74. Revelli, M.A. (2001). "Lawrence Livermore National Laboratory Livermore Site LLNL Main Site Apr. 2001." UCRL-AR-135026-01-4. LLNL.
75. Revelli, M.A. (2001). "Lawrence Livermore National Laboratory Livermore Site Monthly Sewer Monitoring Report for LLNL Main Site March 2001." UCRL-AR-135026-01-3. LLNL.
76. Revelli, M.A. (2001). "Lawrence Livermore National Laboratory Livermore Site Monthly Sewer Monitoring Report for LLNL Main Site May 2001." UCRL-AR-135026-01-5. LLNL.
77. Revelli, M.A. (2001). "Lawrence Livermore National Laboratory Livermore Site Monthly Sewer Monitoring Report for LLNL Main Site June 2001." UCRL-AR-135026-01-6. LLNL.
78. Revelli, M.A. and E. Christofferson (2001). "Lawrence Livermore National Laboratory Site 300 Compliance Monitoring Program for the Closed Building 829 Facility Annual Report 2000." UCRL-AR-143121-DR. LLNL.
79. Revelli, M.A. and H.L. Galles (2001). "Lawrence Livermore National Ground Water Discharge Annual Self-Monitoring Report." UCRL-AR-143911. LLNL.
80. Roberts, J., B. Bonner and P. Kasameyer (2001). "Electrical Resistivity Measurements of Intact and Fractured Geothermal Reservoir Rocks." UCRL-JC-140909.
81. Robison, W.L., V.E. Noshkin, T.F. Hamilton, C.L. Conrado and K.T. Bogen (2001). "An Assessment of the Current Day Impact of Various Materials Associated with the U.S. Nuclear Test Program in the Marshall Islands." UCRL-LR-143980. Lawrence Livermore National Laboratory.
82. Rosen, R.S., M. Kassner, T.A. Hayes and C. Daraio (2001). "Creep Fracture Fundamentals Applied to Fracture of Zircaloy." UCRL-JC-144056.

83. Ryall, F. and C. Schultz (2001). "Seismic Waveform Characterization at LLNL: Analysis Procedures and Issues." UCRL-ID-146229.
84. Savy, J. and D. Bernreuter (2001). "Comparison of the PSHA results of the 1993-EUS-update and the 1998-TIP studies for waste bar." UCRL-ID-142039.
85. Schultz, C. and W. Walter (2001). "A Preliminary Look at the Feasibility of Space-or UAV-Based Laser Seismometers." UCRL-AR-142081.
86. Stevenson, M., J. Coty, J. Stewart and T. Carlsen (2001). "Developing Terrestrial Trophic Models for Petroleum and Natural Gas Exploration and Production Sites: the Oklahoma Tallgrass Prairie Preserve Example." UCRL-ID-142165.
87. Sullivan, T.J., R.D. Belles, J.S. Ellis, M. Chino and H. Nagai (2001). "A Report of the Joint Development of a Prototype Communications Link to Share Nuclear Accident Dispersion and Dose Assessment Modeling Products between JAERI/WSPEEDI and LLNL/NARAC." UCRL-ID-143976.
88. Sun, Y., T.A. Buscheck, K. Mansoor and X. Lu (2001). "Analytical Solutions for Sequentially Reactive Transport with Different Retardation Factors." UCRL-ID-145211. LLNL.
89. Taylor, P., S. Gulev, B. Barnier, F. Bradely, T. Charlock, P. Gleckler, D. Legler, R. Lindau, D. Rothrock, D.J. Schulz, A. da Silva, A. Sterl and G. White (2001). "Report of the Joint WCRP/SCOR Working Group on Air-Sea Fluxes."
90. Thomas, D. (2001). "Analysis of Accountability and Monitoring Data from the Enrichment Plant at the Siberian Chemical Enterprise for Calendar Years 1998, 1999, and 2000." UCRL-ID-144608.
91. Vogel, J.S., T. Ognibene, M. Roberts, T. Brown, A. Clifford, D. Espinosa and Y. Lin (2001). "Low Charge-state AMS for Biological Research." 98 ERI-012, UCRL-ID-142803. LLNL.
92. Vogt, D. (2001). "Technical Review Report for the 9975 Package for the Shipment of Radioactive Material." UCRL-ID-145802.
93. Vogt, D. (2001). "Technical Review Report for the Chalfant Packages for the Shipment of Radioactive Material." UCRL-ID-143181-DR.
94. Walter, W., W. Arabasz and J. Pechmann (2001). "Seismic Characterization of Coal-Mining Seismicity in Utah for CTBT Monitoring." UCRL-CR-143772. University of Utah.
95. Warner, S., N. Platt, J. Heagy, S. Bradley, G. Bieberbach, G. Sugiyama, J. Nasstrom, K. Foster and D. Larson (2001). "User-Oriented Measures of Effectiveness for the Evaluation of Transport and Dispersion Models." UCRL-ID-142520.
96. Warner, S., J. Heagy, N. Platt, D. Larson, G. Sugiyama, J. Nasstrom, K. Foster, S. Bradley and G. Bieberbach (2001). "Evaluation of Transport and Dispersion Models: An Initial Controlled Comparison of HPAC and NARAC Predictions." UCRL-JC-144276.
97. Wehner, M.F., K. Taylor, C. Doutriaux, K. AchutaRao, P. Gleckler, J. Hnilo and J. Boyle (2001). "PCMDI Analysis Of Candidate Atmospheric Models for CCSM, Parts 1 and 2." UCRL-JC-141573.

98. Welten, K.C., K. Nishiizumi and M.W. Caffee (2001). "The Search for Meteorites with Complex Exposure Histories Among Ordinary Chondrites with Low $^{3}\text{He}/^{21}\text{Ne}$ Ratios." UCRL-ID-145418. University of Berkeley and Lawrence Livermore National Laboratory.
99. Zhang, M., S. Xie, R.T. Cederwall and J.J. Yio (2001). "Description of the ARM Operational Objective Analysis System." UCRL-JC-144003

Conference Proceedings and Abstracts

1. Aceves, S.M., J. Martinez-Frias, D.L. Flowers, J.R. Smith, R.W. Dibble, J.F. Wright and R.P. Hessel (2001). "A Decoupled Model of Detailed Fluid Mechanics Followed by Detailed Chemical Kinetics for Prediction of Iso-Octane HCCI Combustion." Society of Automotive Engineers International Fall Fuels & Lubricants Meeting and Exposition, San Antonio, TX, Sep 24-27, 2001, UCRL-JC-144652.
2. Aceves, S.M., J. Martinez-Frias, O. Garcia-Villazana and F.J. Espinosa (2001). "Insulated Pressure Vessels for Vehicular Hydrogen Storage: Analysis and Performance Evaluation." American Society of Mechanical Engineers, International Mechanical Engineering Congress and Exposition, New York, NY, Nov 11–16, 2001, UCRL-JC-144544.
3. Aceves, S.M., D.L. Flowers, J. Martinez-Frias, J.R. Smith, C.K. Westbrook, W.J. Pitz, R. Dibble, J.F. Wright, W.C. Akinyemi and R.P. Hessel (2001). "A Sequential Fluid-Mechanic Chemical-Kinetic Model of Propane HCCI Combustion." Society of Automotive Engineers 2001 World Congress, Detroit, MI, Mar 5–8, 2001, UCRL-JC-141527.
4. Aceves, S.M., D.L. Flowers, J. Martinez-Frias, J.R. Smith, M. Au and J. Girard (2001). "HCCI Combustion: Analysis and Experiments." Society of Automotive Engineers Government Industry Meeting, Washington, DC, May 5–8, 2001, UCRL-JC-143788.
5. Aceves, S., J. Martinez-Frias, O. Garcia-Villazana and F. Espinosa-Loza (2001). "Performance and Certification Testing of Insulated Pressure Vessels for Vehicular Hydrogen Storage." U.S. DOE Hydrogen Program Annual Review Meeting, Baltimore, MD, Apr 17–19, 2001, UCRL-JC-144096.
6. Allen, P.G., E.R. Sylvester, P.H. Zhao, A.B. Kersting and M. Zavarin (2001). "Surface interactions and reactivity of actinide ions with mineral colloids." *Abstracts of paper of The American Chemical Society*, **222**: 42-GEOC,
7. Antoun, T., I. Lomov and L. Glenn (2001). "Development and Application of a Strength and Damage Model for Rock Under Dynamic Loading." The 38th U.S. Rock Mechanics Symposium, Washington, DC, July 7–10, 2001, UCRL-JC-142748.
8. Atherton, C.S., D.A. Rotman, D.J. Bergmann, P.J. Cameron-Smith, C.C. Chuang, P.S. Connell, J.E. Dignon, A. Franz, K.E. Grant, D.E. Kinnison, C.R. Molenkamp, D.D. Proctor and J.R. Tannahill (2001). "IMPACT, the LLNL 3-D Global Troposphere-Stratosphere Chemical Transport Model: A Model Description." American Geophysical Union, Washington, DC, Oct. 26, 2001, UCRL-JC-145956.
9. Bench, G., P.G. Grant, D. Ueda, S.S. Cliff, K.D. Perry and T.A. Cahill (2001). "The Use of STIM and PESA to Respectively Measure Profiles of Aerosol Mass and Hydrogen Content across Mylar Rotating Drum Impactor Samples." American Geophysical Union Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146368.

10. Berge, P., L. Hutchings, J. Wagoner and P. Kasameyer (2001). "Rock Physics Interpretation of P-wave Q and Velocity Structure, Geology, Fluids, and Fractures at the Southeast Portion of The Geysers Geothermal Reservoir." American Geophysical Union 2001 Fall Meeting, San Francisco, California, Dec. 10–14, 2001, UCRL-JC-145253.
11. Berge, P. (2001). "Modeling Compressional and Shear Wave Velocities of Unconsolidated Sediments in the Vadose Zone." 2001 AGU Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145245.
12. Berge, P.A. (2001). "Scientific Results for EMSP Project #70108 Effects of Fluid Distribution on Measured Geophysical Properties for Partially Saturated Shallow Subsurface Conditions." FY2002 EMSP Vadose Zone Principal Investigator Workshop, PNNL, Richland, Washington, Nov. 5–6, 2002, UCRL-JC-145937.
13. Bergmann, D.J., A. Franz and P. Cameron-Smith (2001). "⁷Be and ¹⁰Be Tracer Simulations using IMPACT, the LLNL Atmospheric Chemical Transport Model: An Analysis of the Sensitivity to Source Distribution and Meteorological Data." American Geophysical Union, 2001 Spring Meeting, Boston, May 29–June 2, 2001, UCRL-JC-142953-Abs.
14. Bertete-Aguirre, H., A.C. Tripp, R.D. Jarrard and E. Cherkaev (2001). "Triaxial Induction Logging for Everyone Credos and Caveats." Annual Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Denver, November 2001, UCRL-JC-144948.
15. Blair, S.C., S.R. Carlson and J.L. Wagoner (2001). "Distinct Element Modeling of the Drift Scale Test." American Rock Mechanics (AMR) Association, DC Rocks: "Rock Mechanics in the National Interest," 38th U.S. Rock Mechanics Symposium, Washington, DC, July 7–10, 2001, UCRL-JC-140641.
16. Blair, S., S. Carlson and J. Wagoner (2001). "Coupled THM Estimate of Fracture Permeability in Fractured Welded Tuff." 2001 AGU Fall Meeting, San Francisco, Dec. 10–15, 2001, UCRL-JC-145270.
17. Blasy, J., A. Karpov, Y. Churikov, D. Bukin, V. Zuev and B. Labiak (2001). "Assurances at the All Russian Scientific Research institute of Technical Physics (VNIITF)." Institute of Nuclear Materials Management 42nd Annual Meeting, Indian Wells, CA, July 15, 2001, UCRL-JC-143479-ABS.
18. Bourcier, W., S. Martin, B. Viani and C. Bruton (2001). "Developing a Process for Commercial Silica Production from Geothermal Brines." Geothermal Resource Council 2001 Annual Meeting, San Diego, CA, Aug. 26, 2001, UCRL-JC-143426.
19. Bradley, M.M., M.J. Leach, C.R. Molenkamp, C.H. Hall, L.A. Wilder and L.A. Neher (2001). "A National Wildfire Behavior Prediction Initiative: Full-Physics Models on Supercomputers." California's Wildfire Conference 2001: 10 Years After the 1991 East Bay Hills Fire, Oakland, CA, Oct. 10–12, 2001, UCRL-JC-147051-ABS.
20. Brown, T.A., A.A. Marchetti, T.F. Hamilton, J. Knezovich and J.E. McAninch (2001). "Pu Measurements by Accelerator Mass Spectrometry at LLNL." 47th Conference on Bioassay, Analytical, and Environmental Radiochemistry, Honolulu, Nov. 3–8, 2001, UCEL-JC-145213.
21. Brown, T.A. (2001). "The Center for Accelerator Mass Spectrometry at Lawrence Livermore National Laboratory: 2001 SNEAP Laboratory Report." 35th Symposium for

Northeastern Accelerator Personnel (SNEAP), Lund, Sweden, Oct. 21–25, 2001, UCRL-JC-145542.

22. Buchholz, B.A., G. Shan, S.J. Gee, J.S. Vogel and B.D. Hammock (2001). “Isotope Labeled Immunoassays for Biomarker Determination.” Application of Technology to Chemical Mixture Research, Ft. Collins, CO, Jan. 9–11, 2001, UCRL-MI-141956.
23. Buchholz, B.A., A.S. Cheng and R.W. Dibble (2001). “Isotopic Tracing of Fuel Components in Particulate Matter from a Compression Ignition Engine Fueled with Ethanol-in-Diesel Blends.” Joint Meeting of US Sections of the Combustion Institute, Oakland, CA, March 25–28, 2001, UCRL-JC-143103.
24. Buscheck, T.A., N.D. Rosenberg, J.D. Gansemer and Y.-W.A. Sun, Emeryville, CA (2001). “Multiscale Thermohydrologic Model: Addressing Variability and Uncertainty at Yucca Mountain.” 2001 International High-Level Radioactive Waste Management Conference, Las Vegas, Nevada, October 2000, UCRL-JC-141236.
25. Buscheck, T.A., N.D. Rosenberg, J.D. Gansemer and Y.-W.A. Sun, Emeryville, CA (2001). “Thermohydrologic Behavior and Repository Design at Yucca Mountain.” 2001 International High-Level Radioactive Waste Management Conference, Las Vegas, Nevada, October 2000, UCRL-JC-141237.
26. Buscheck, T.A., N.D. Rosenberg, J.A. Blink, Y. Sun and D. Gansemer (2001). “Analysis of Thermohydrologic Behavior for Above-Boiling Thermal-Operating Modes for a Repository and Yucca Mountain.” American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145280-ABS.
27. Caldeira, K., H.J. Herzog, M.E. Wickett and J. Reilly (2001). “The Effectiveness of Ocean Carbon Sequestration by Direct Injection Leakage and Discount Rates.” American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145283-ABS.
28. Caldeira, K. and M.E. Wickett (2001). “Comparing pH Impacts of Oceanic CO₂ Injection and Atmospheric CO₂ Release.” 2002 American Geophysical Union Ocean Sciences Conferences, Hawaii, February 2001, UCRL-JC-147567 Abs.
29. Caldeira, K., M.E. Wickett, P.B. Duffy and J.P. Barry (2001). “Anthropogenic Carbon and Ocean pH.” American Geophysical Union Conference, San Francisco, Dec. 10–14, 2001, UCRL-JC-143232-ABS.
30. Cameron-Smith, P.J., D.J. Bergmann and P.S. Connell (2001). “Conserving Mass in a CTM with a Pressure-Fixer: The Effect on a Full Ozone-Chemistry Run of IMPACT.” American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145363-Abs.
31. Cameron-Smith, P.J., P.S. Connell, D.A. Rotman, M.J. Prather and J.M. Rodriguez (2001). “Ensuring Mass-Conservation in Offline CTMs: The GMI Approach.” American Geophysical Union, 2001 Spring Meeting, Boston, May 29–June 2, 2001, UCRL-Pres-142943.
32. Carlsen, T. and R. Efroymson (2001). “Current Directions in Screening-level Ecological Risk Assessments.” Society of Petroleum Engineers Exploration and Production Environmental Conference, San Antonio, Texas, Feb. 26–28, 2001, UCRL-JC-140535.
33. Carroll, S.A., S. Roberts and P. O’Day (2001). “Strontium sorption to mineral surfaces: A discussion of the importance of surface charge for outer-sphere sorption.” *Abstracts of paper of The American Chemical Society*, **221**: 81-GEOC,

34. Carroll, S.A., C.I. Steefel, S.K. Roberts and P.H. Zhao (2001). "Cesium Transport in Hanford Sediments: Application of an Experimentally Based Cation Exchange Model." *Abstracts of paper of The American Chemical Society*, **222**: 66-GEOC,
35. Carroll, S.A. (2001). "Experimental Determination of Ca-Silicate Dissolution Rates: A Source of Calcium for Geologic CO₂." 1st National Conference on Carbon Sequestration, Washington, DC, May 14, 2001, UCRL-JC-141059.
36. Cederwall, R.T., S. Xie, W.F. Feltz, R.O. Knuteson, H.B. Howell, H. Hibbard, T. Rink, T. Whittaker and D.D. Turner (2001). "Retrieval and Visualization of AERIPLUS Temperature and Moisture Profiles for Assimilation into ARM Single-Column Models." Tenth ARM Science Team Meeting Proceedings, San Antonio, Texas, March 13–17, 2000, UCRL-JC-145024.
37. Cederwall, R.T., S.C. Xie, J.J. Yio, K.-M. Xu, S.K. Krueger, L.J. Donner, C.J. Seman, F. Guichard, W. Grabowski, D.E. Johnson and W.-K. Tao (2001). "Cloud-Resolving Model Intercomparison with the ARM Summer 1997 IOP Data." Tenth ARM Science Team Meeting Proceedings, San Antonio, Texas, Mar. 13–17, 2000, UCRL-JC-145023.
38. Chan, S.T., D.E. Stevens and P.M. Gresho (2001). "Simulation of Natural Convection Flow in a Cavity Using Finite Element and Implicit Projection Methods." First MIT Conference on Computational Fluid and Solid Mechanics, MIT, Cambridge MA, June 14, 2001, UCRL-JC-143054 Abs.
39. Chan, S.T., D.E. Stevens and W.S. Smith (2001). "Validation of Two CFD Urban Dispersion Models Using High Resolution Wind Tunnel Data." 3rd International Symposium on Environmental Hydraulics, Arizona State University, Dec 5–8, 2001, UCRL-JC-142234 Abs.
40. Cherepy, N., R. Krueger and J. Cooper (2001). "Evaluation of Direct Electrochemical Conversion of Carbon Anode Fuels in Molten Carbonate Electrolyte in a Novel Configuration." Fall Meeting of the Electrochemical Society, October 2001, UCRL-JC-143398.
41. Chiarappa-Zucca, M.L., R.C. Finkel, R.E. McAninch, R.E. Martinelli and K.W. Turteltaub (2001). "Dosimetry of Beryllium in an Animal Model by Accelerator Mass Spectrometry." The 41st Annual Meeting Society of Toxicology, Nashville, Tennessee, Mar. 17–21, 2001, UCRL-JC-145851-ABS.
42. Chin, H.-N.S., M. Leach, G. Sugiyama and F. Aluzzi (2001). "A Preliminary Study Of Surface Temperature Cold Bias In COAMPS." Ninth Conference on Mesoscale Processes, Ft. Lauderdale, Florida, July 30–Aug. 2, 2001, UCRL-JC-142216-Abs.
43. Chin, H.-N.S. (2001). "Towards Improving Scale Interactions in General Circulation Models: COAMPS Applications at Lawrence Livermore National Laboratory: Part B: Sensitivity Study of an Urban Canopy Parameterization in COAMPS." UCRL-JC-145730-ABS.
44. Chuang, C.C., J.E. Penner and K. Kawamoto (2001). "Model Simulations of the First Aerosol Indirect Effect and Comparison of Cloud Susceptibility to Satellite Measurements." Proceedings of the 11th ARM Science Team Meeting, Atlanta, Mar. 19–23, 2001, UCRL-JC-147528.

45. Chuang, C.C., D.J. Bergmann, J.E. Dignon and P.S. Connell (2001). "Global Modeling of Tropospheric Aerosols by LLNL IMPACT and Comparisons with Field Measurements." American Geophysical Union, Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145282-ABS.
46. Clifford, A.J., Y. Lin, S.R. Dueker, R. Green, B.A. Buchholz and J.S. Vogel (2001). "Effect of MTHFR Mutation on the Fate of an Oral Tracer Dose of 14C-Folic Acid." Federation of American Societies for Experimental Biology (FASEB 2001 Meeting), Orlando, FL, Mar. 31–Apr. 4, 2001, UCRL-JC- 141529.
47. Connell, P.S., P.J. Cameron-Smith, D.A. Rotman, M.J. Prather and J.M. Rodriguez (2001). "Use of an Ozone-Like Tracer (SYNOZ) to Constrain Cross-Tropopause Flux in the GMI Tropospheric Model." American Geophysical Union, 2001 Spring Meeting, Boston, May 29–June 2, UCRL-MI-142942.
48. Connell, P.S., D.J. Bergmann and D.A. Rotman (2001). "Critical Analysis of the Atmospheric Importance of Short-Lived Bromo- and Iodoalkane Emissions Using the LLNL IMPACT Model." American Geophysical Union, Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145297-ABS.
49. Davis, G. and D. Schrader (2001). "Designing Remote Monitoring Systems for Long Term Maintenance and Reliability." Symposium on international Safeguards: Verification and Nuclear Material Security, Vienna, Austria, Oct. 29, 2001, UCRL-JC-143539 Rev. 1.
50. Davisson, M.L. (2001). "Organic Matter in Rivers: The Crossroads between Climate and Water Quality." Our Waters Our Rivers, St. Louis as a 21st Century River City, Symposium at the Missouri Botanical, St. Louis, MO UCRL-JC-143510.
51. deMenocal, P.B., G. Ganssen, T. Marchitto, J. Ortiz and T. Guilderson (2001). "Holocene Variability of the Atlantic and Indian Ocean Subtropics." Geological Society of America Annual meeting, Boston, Nov. 5–8, 2001, UCRL-JC-145005 Abs.
52. deMenocal, P.B., T.M. Marchitto, G.C. Bond and T.P. Guilderson (2001). "Holocene Variations in Upper North Atlantic Deep Water Circulation." American Geophysical Union Meeting, San Francisco, Dec. 10–11, 2001, UCRL-JC-146367.
53. Dingler, J.A., G.M. Kent, J.A. Babcock, N.W. Driscoll, A.J. Harding, G.G. Seitz, J.V. Gardner, C.R. Goldman, L. Mayer, C.W. Morgan and B.C. Richards (2001). "Differential Strain Accumulation Across Lake Tahoe as Measured from Submerged Paleo-Shorelines." American Geophysical Union Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146395.
54. Dueker, S.R., J.R. Follett, Y. Lin, B.A. Buchholz, J.S. Vogel and A.J. Clifford (2001). "Plasma Half-lives of Beta-Carotene following I.V. Infusion of Autologous 14C-carotene-labeled Plasma in Humans." Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology (FASEB) 2001, Orlando, FL, Mar. 31–Apr. 4, 2001, UCRL-JC-147049.
55. Duffy, P.B., B. Govindasamy, J. Milovich and S. Thompson (2001). "Preliminary Results From High Resolution Simulations of Global Climate With an Atmospheric General Circulation Model." American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145284-ABS.

56. Enns, L., M. Weinfeld, K. Bogen and A. Murtha (2001). "HyperSensitive-Nonlinear Low-Dose Dose-Response for Arrested Proliferation of Human A549 Cells Exposed to Low-Dose Gamma Radiation, Detected by Gel Micro-Drop Flow Cytometry." DOE/NASA Radiation Investigators' Workshop: A Joint Workshop Comprising the U.S. Department of Energy Office of Biological and Environmental Research Low Dose Radiation Research Program Workshop II, and the National Aeronautics and Space Administration Office of Biological and Physical Research 12th Annual Space Radiation Health Investigators' Workshop, Washington DC, June 2001,
57. Enns, L., M. Weinfeld, L. Hall, G. Keating, G. Murphy, K. Bogen and R. Langlois (2001). "Low Dose Rate Gamma Radiation Increases Cytotoxicity as revealed by Gel-Microdrop (GMD) Flow Cytometry." 40th Annual Meeting of the Society of Toxicology, San Francisco, Mar. 25–29, 2001, UCRL-JC-140667 Abs.
58. Ermak, D.L. (2001). "Overview: Modeling and Prediction." DOE 2001 Chemical and Biological National Security Program (CBNP) Summer Meeting, Arlington, VA, July 24–26, 2001, UCRL-JC-144561-Abs.
59. Fairbanks, R.G., R.D. Mortlock, T. Guilderson, J. Rubenstone, T.-c. Chiu and D.K. Hubbard (2001). "Radiocarbon Calibration Via U/TH/PA on Pristine Corals." Geological Society of America Annual Meeting, Boston, Nov. 5–8, 2001, UCRL-JC-145006 Abs.
60. Fairbanks, R.G., R.A. Mortlock, T.P. Guilderson, J.L. Rubenstone and T. Chiu (2001). "Deglacial Temperature Record from the Central Equatorial Pacific: Results from Wire-Line Drilling Offshore Kiritimati Atoll." American Geophysical Union Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146366.
61. Farber, D. (2001). "Observations of a Water Induced Transition." 2001 Fall AGU Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145246 Abs.
62. Flanagan, M.P., S.C. Myers, M.E. Pasyanis and C.A. Schultz (2001). "3-D a priori Model Constraints and Uncertainties for Improving Seismic Event Location." *EOS Trans. Am. Geophys. Un.*, **82** (December 2001):F815, UCRL-JC-138984.
63. Flanagan, M., M. Pasyanos, S. Myers and C. Schultz (2001). "Testing 3-D Crust and Upper Mantle Velocity Models to Improve Regional Seismic Event Location in the Middle East." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141981 ABS.
64. Flanagan, M. (2001). "Integrating and Validating a Diverse Set of Velocity Models to Improve Seismic Location." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2-5, 2001, UCRL-JC-143903 ABS.
65. Flanagan, M., C. Reif, G. Masters, G. Laske and P. Shearer (2001). "Joint Inversions for Velocity and Discontinuity Structure in the Mantle." American Geophysical Union, Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146223-ABS.
66. Flowers, D., S. Aceves, J. Martinez-Frias, R. Smith, M. Au, J. Girard and R. Dibble (2001). "Operation of a Four-cylinder 1.9L Propane Fueled HCCI Engine." The Second Joint Meeting of the US Sections of the Combustion Institute, Oakland, CA, Mar. 25–28, 2001, UCRL-JC-142948.
67. Flowers, D., S. Aceves, J. Martinez-Frias, R. Smith, M. Au, J. Girard and R. Dibble (2001). "Operation of a Four-cylinder 1.9L Propane Fueled Homogeneous Charge Compression

- Ignition Engine: Basic Operating Characteristics and Cylinder-to-Cylinder Effects.” Society of Automotive Engineers Spring Fuels and Lubricants Conference and Exposition, Orlando, FL, May 7–9, 2001, UCRL-JC-142867.
68. Follett, J.R., S.R. Dueker, Y. Lin, B.A. Buchholz, J.S. Vogel and A.J. Clifford (2001). “Application of Accelerator Mass Spectrometry to Assess Post-Prandial Association of Beta-Carotene with Plasma Lipoproteins.” Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology (FASEB) 2001, Orlando, FL, Mar. 31–Apr. 4, 2001, UCRL-JC-147050.
 69. Foxall, B. (2001). “Moment-Balanced Characteristic Earthquake Model Rates For Multi-Segment Faults.” 2001 AGU Fall Meeting, San Francisco, Dec. 10–15, 2001, UCRL-JC-145256.
 70. Friddell, J.E., R.C. Thunell and T. Guilderson (2001). “Subtropical Pacific Holocene Climate Variability and el Niño: Stable Isotope and Biogenic Silica Evidence from Santa Barbara Basin.” Geological Society of America Annual Meeting, Boston, Nov. 5–8, 2001, UCRL-JC-145007 Abs.
 71. Furrey, L., L. Hutchings and J. Wagoner (2001). “Preliminary Fracture Model for The Geysers Geothermal Reservoir.” American Geophysical Union 2001 Fall Meeting, San Francisco, Dec. 10–15, 2001, UCRL-JC-145254-ABS.
 72. Glascoe, L. and A.V. Wolfsberg (2001). “Model Analysis of Low-Level Actinide Waste Disposal in Deep Boreholes.” American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145277-ABS.
 73. Glassley, W.E., J.J. Nitao and W. Grant (2001). “Climate Change Contribution to Uncertainty in Vadose zone Thermal, Hydrological and Geochemical Properties.” Geological Society of America Annual Meeting and Exposition 2001, Boston, Nov. 1, 2001, UCRL-JC-145182-ABS.
 74. Goldstein, P. (2001). “On the Importance of Multi-Dimensional Wave Propagation Phenomena for Regional Test Ban Monitoring.” Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141982 Abs.
 75. Goodwin, M.B., G. Bench and P. Grant (2001). “Evidence for Postmortem Enrichment in Late Cretaceous Dinosaur Bone using Microbeam PIXE.” North American Paleontological Convention, Berkeley, CA, June 26–July 1, 2001, UCRL-JC-142820-Abs.
 76. Govindasamy, B. and P.B. Duffy (2001). “High Resolution CCM3 Global Climate Change Simulations.” American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145285-ABS.
 77. Grant, K.E., C.C. Chuang, S.L. Lee and C.S. Woodward (2001). “Effects of Aerosols on Cloud Properties—Calculations with SensCAMP, A Rising Parcel Model with Parameter Sensitivity Analysis.” American Geophysical Union, Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-MI-145309.
 78. Guilderson, T.P., M. Kashgarian and D.P. Schrag (2001). “Biogeochemical Proxies in Scleractinian Corals used to Reconstruct Ocean Circulation.” International Conference on the Study of Environmental Change Using Isotope Techniques, Vienna, Austria, Apr. 23–27, 2001, UCRL-JC-141557.

79. Hafner, R. and R.P. Radev (2001). "Detection of Stable Metal Tritide Particulates Using Bremsstrahlung Radiation." Annual Health Physics Society Meeting, Cleveland, OH, Jan. 18, 2001, UCRL-JC-142057-Abs.
80. Hamilton, T.F. (2001). "Transport and Characterization of Radioactive Aggregates at Former Nuclear Test Sites in the Marshall Islands." First Research Coordinated Meeting under CRP on "Radiochemical, Chemical and Physical Characterization of Radioactive Particles in the Environment", Vienna, Austria, May 7–11, 2001, UCRL-JC-143689-ABS.
81. Hamilton, T.F., T. Brown, J. Brunk, R. Martinelli, A.A. Marchetti, J.E. McAninch and C.C. Cox (2001). "Low-Level Detection of Plutonium Isotope Signatures in Marshall Island Soils Containing Aged Fallout Using Accelerator Mass Spectrometry." International Conference on Radioactivity in the Environment, Monaco, Sept. 1–5, 2002, UCRL-JC-146555 Abs.
82. Hamilton, T., T. Brown, A. Marchetti, J. McAninch and C. Cox (2001). "Use of Accelerated Mass Spectrometry for Plutonium Urinalysis." 47th Annual Conference on Bioassay, Analytical and Environmental Radiochemistry, Honolulu, HI, Nov. 3–8, 2001, UCRL-JC-145141-ABS.
83. Harben, P.E. and C.O. Boro (2001). "Implosion Source Development and Diego Garcia Reflections." 23rd DoD/DOE seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-1437570.
84. Harris, D., W. Walter, A. Rodgers, A. Sicherman, S. Myers and C. Schultz (2001). "LLNL Detection Program: Broad Area Characterization of Phase Detectability and Empirical Detectors for Specific Sources." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-144343-EXT-ABS.
85. Harris, D. (2001). "Subspace Techniques for Detecting Repeating Events." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141980.
86. Hartleb, R.D., J.F. Dolan, O. Kozaci, G.G. Seitz, H.S. Akyuz and A.A. Barka (2001). "Paleoseismologic Studies of the North Anatolian Fault, Cukurcimen and Ulaslar, North-Central Turkey." American Geophysical Union Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146393.
87. Hassberger, J. (2001). "A Strategic Framework for Proliferation Resistance: A Systematic Approach for the Identification and Evaluation of Technology Opportunities to Enhance the Proliferation Resistance of Civilian Nuclear Energy Systems." Global 2001: "Back-End of the Fuel Cycle: From Research to Solutions," Paris, France, Sept 9–13, 2001, UCRL-JC-142356.
88. Hassberger, J. (2001). "Technical Opportunities for Increasing Proliferation Resistance of Nuclear Power Systems (TOPS) Task Force." Nuclear Control Institute: Nuclear Power and the Spread of Nuclear Weapons - can we have one without the other?, Washington, DC, Apr. 9, 2001, UCRL-JC-143282.
89. Herold, D.A., C.M. Lu, J.D. Rivera, J.S. Vogel, B.A. Buchholz, D.W. Burton, L. Deftos and R.L. Fitzgerald (2001). "Mass Spectrometric Immunoassay: Parathyroid Hormone Related Protein (PTHrP) for Cancer Detection." 222nd ACS National Meeting, Chicago, Aug. 26–30, 2001, UCRL-JC-147169.

90. Hickman, D., C. Conrado, E. Arelong, S. Langinbelik and T. Hamilton (2001). "An Assessment of Cesium-137 Exposure on Rongelap Island Resettlement Workers Based on Whole Body Counting (1999-2000)." 47th Annual Conference on Bioassay, Analytical & Environmental Radiochemistry, Honolulu, HI, Nov. 3–8, 2001, UCRL-JC-145139-ABS.
91. Higgins, S.R., B. Greer, L.H. Boram, C.M. Eggleston, G. Jordan and K.G. Knauss (2001). "Study of heterogeneous kinetics at carbonate mineral surface using hydrothermal atomic force microscopy." Abstracts of paper of The American Chemical Society,
92. Hodell, D.A., J.H. Curtis, M. Brenner, M. Rosenmeier, G. Haug and T. Guilderson (2001). "Holocene Centennial Climate Variability in the Caribbean." Geological Society of America Annual Meeting, Boston, Nov. 5–8, 2001, UCRL-JC-145004 ABS.
93. Horn, J.M., S.I. Martin and B. Masterson (2001). "Evidence of Biogenic Corrosion of Titanium After Exposure to a Continuous Culture of *Thiobacillus Ferrooxidans* Grown in Thiosulfate Medium." Corrosion 2001, National Association of Corrosion Engineers Odyssey (NACE), Houston, Texas, Mar. 11–16, 2001, UCRL-JC-141910.
94. Hovingh, J. (2001). "ASTM Standard Practice for Thermal Qualification of Type B Nuclear Packages." 2001 American Society of Mechanical Engineers Pressure Vessels and Piping Conference, Hyatt Regency, Atlanta, June 1, 2001, UCRL-JC-144000.
95. Hutchings, L., L. Basei and S. Glaser (2001). "Analysis of Site Response at Yerba Buena Island, San Francisco Bay, California by Weak Motion Recordings." 2001 AGU fall meeting, San Francisco, Dec. 10–15, 2001, UCRL-JC-144255.
96. Ioannidou, E., I. Kalogeras, N. Voulgaris and L. Hutchings (2001). "Analysis of Site Response in the Athens Area from the 7 September 1999, Mw=5.9 Athens Earthquake and Aftershock Recordings, and Intensity Observations." 2001 AGU Fall Meeting, San Francisco, Dec. 10–15, 2001, UCRL-JC-145258.
97. Ioannidou, E., I. Kalogeras, N. Voulgaris, L. Hutchings and G. Stavrakakis (2001). "Source Rupture Model and Strong Ground Motion Synthesis for the 7 September 1999, M=5.9 Athens Earthquake." 2001 AGU Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145257.
98. Jardine, L.J., G.B. Borisov, S.I. Rovny, K.G. Kudinov and A.A. Shvedov (2001). "An Opportunity to Immobilize 1.6 MT or More of Weapons Grade Plutonium at the Mayak and Krasnoyarsk-26 Sites." 8th International Conference on Radioactive Waste Management and Environmental Remediation, Bruges, Belgium, Sep. 30–Oct. 4, 2001, UCRL-JC-141849.
99. Jardine, L.J., A.S. Aloy, O.A. Iskhakova, A.V. Trofimenko, V.S. Belov, S.I. Rovny, G.M. Medvedev and L.J. Jardine (2001). "Characterization of Borosilicate Composition for Immobilization of Pu Containing Sludges." 8th International Conference on Radioactive Waste Management and Environmental Remediation, Bruges, Belgium, Sep. 30–Oct. 4, 2001, UCRL-JC-141847.
100. Jardine, L.J., A.S. Aloy, E.N. Kovaskaya, T.I. Koltsova, S.E. Samoylov, S.I. Rovny and G.M. Medvedev (2001). "Immobilization of Am-241, Formed under Plutonium Metal Conversion into Environmental Remediation." 8th International Conference on Radioactive Waste Management and Environmental Remediation, Bruges, Belgium, Sep. 30–Oct. 4, 2001, UCRL-JC-141848.

101. Kirkendall, B. and J. Roberts (2001). "Reservoir Management of Sequestered CO₂ Using Borehole Electromagnetic Tomographic Imaging." International Gas Research Council Annual Meeting, Amsterdam, The Netherlands, Nov. 20–25, 2001, UCRL-JC-144655.
102. Kirkendall, B. and J. Roberts (2001). "Electromagnetic Imaging of CO₂ Sequestration at an Enhanced Oil Recovery Site." First National Conference on Carbon Sequestration, Washington, DC, May 14, 2001, UCRL-JC-142753.
103. Kirkendall, B., R. Mallan, M. Wilt and K. Osato (2001). "Subsurface electrical measurements at Dixie Valley, Nevada, using single-well and surface-to-well induction logging." 26th Workshop on Geothermal Reservoir Engineering, Stanford, CA, Jan. 29–31, 2001, UCRL-JC-147324.
104. Knapp, R.B., A.F.B. Tompson, N.D. Rosenberg, J.H.-P.P.a.A.C.P.P. Richardson, D.K. Smith, D.R.-L.A.N.L. Janecky, B.-K. Duisebayev, Almaty, Kazakhstan, O.-I.o.N. Tyupkina, Almaty, Kazakhstan and V.V.-I.o.H.a.H. Veselov, Almaty, Kazakhstan (2001). "Proceedings of the Radionuclide Contamination in Water Resources Workshop." Radionuclide Contamination in Water Resources, Almaty, Kazakhstan, May 28–June 1, 2001, UCRL-JC-144867.
105. Knapp, R.B., A. Sarnogoev, B. Duisebayev, N.D. Rosenberg, A.F.B. Tompson and D.R. Janecky (2001). "Radioactive Tailings Issues in Kyrgyzstan and Kazakhstan." Tailings and Mine Waste, Fort Collins, CO, Feb. 27, 2002, UCRL-JC-144915-ABS.
106. Knauss, K.G., J.W. Johnson, C.I. Steefel and J.J. Nitao (2001). "Evaluation of the Impact of CO₂, Aqueous Fluid, and Reservoir Rock Interactions on the Geologic Sequestration of CO₂, with Special Emphasis on Economic Implications." *First National Conference on Carbon Sequestration*, UCRL-JC-143231.
107. Knezovich, J.P. (2001). "Assessing the Fate of Chemicals at Realistic Concentrations: Applications of Accelerator Mass Spectrometry." Annual Meeting of the American Chemical Society, San Diego, CA, Apr. 1–5, 2001, UCRL-JC-142892-Abs.
108. Larsen, S., R. Wiley, P. Roberts and L. House (2001). "Next-Generation Numerical Modeling: Incorporating Elasticity, Anisotropy and Attenuation." Society Exploration Geophysics Conference, UCRL-JC-142910.
109. Layton, D.W. and D.W. Rice (2001). "Assessing and Managing the Risks of Fuel Compounds: Ethanol Case Study." 6th International Conference on Probabilistic Safety Assessment and Management, San Juan, Puerto Rico, June 23–28, 2002, UCRL-JC-145533 Abs.
110. Layton, D.W. and D.W. Rice (2001). "Environmental Implications of Ethanol and Alkylates in Gasoline after an MTBE Phase Out: Results of a California Workshop." The 17th Annual International Conference on Contaminated Soils, Sediments and Water, Amherst, MA, Oct. 22–25, 2001, UCRL-JC-144105 Abs.
111. Leach, M.J., M.J. Brown, H.-N. Chin, J.M. Leone, Jr. and G. Sugiyama (2001). "Fast Response Urban Modeling and Urban Parameterization for Regional Scale Models." DOE 2001 Chemical and Biological National Security Program (CBNP) Summer Meeting, Arlington, VA, July 24–26, 2001, UCRL-JC-144471-ABS.

112. Leach, M.J., H.-N. Chin and M.J. Brown (2001). "Validation of an Urban Parameterization in a Mesoscale Model." International Symposium on Environmental Hydraulic, Tempe, Arizona, Dec. 5–7, 2001, UCRL-JC-144677.
113. Lee, R.L., R.J. Calhoun, S.T. Chan, J.M. Leone, Jr. and D.E. Stevens (2001). "Modeling of Building Scale Flow and Dispersion." 3rd International Symposium on Environmental Hydraulics, Arizona State University, Tempe AZ, Dec 5–8, 2001, UCRL-JC-142235-Abs.
114. Lee, R.L., M.J. Brown, R.J. Calhoun, S.T. Chan, J.M. Leone, Jr. and D.E. Stevens (2001). "High Resolution Modeling of Flow and Dispersion from Building to Urban Scales." DOE 2001 Chemical and Biological National Security Program (CBNP), Arlington, VA, July 24–26, 2001, UCRL-JC-144470-Abs.
115. Lemke, S., J. Follett, S. Dueker, Y. Lin, S. Hickenbottom, B. Buchholz, J. Vogel and A. Clifford (2001). "Urinary Metabolites of Orally Administered b-Carotene in Humans using 14C-Accelerator Mass Spectrometry." Federation of American Societies for Experimental Biology (FASEB 20001 Meeting), Orlando, FL, Mar. 31–Apr. 4, 2001, UCRL-JC-141531.
116. Lichtner, P.C., D.L. Bish, S.B. Yabusaki, C.I. Steefel and K. Pruess (2001). "Radionuclide Migration under the SX-tank Farm at the Hanford Nuclear Waste Complex: Interaction of Concentrated Electrolyte Solutions with Sediments." Abstracts of paper of The American Chemical Society, August 2001,
117. Lin, Y., B.A. Buchholz, L.M. Roger, J.S. Vogel and A.J. Clifford (2001). "Determining the Long-Term Kinetic Behavior of Leucine Metabolism using 14C-Accelerator Mass Spectrometry." *FASEB J*, **15**(4): A266–A266, UCRL-JC-147255.
118. Lin, W., J.C.U. Corp), J. Wagoner and D. Wilder (2001). "Deformation of the Rock Mass in the Drift Scale Test." High-Level Radioactive Conference, Las Vegas, NV, Apr. 29–May 3, 2001, UCRL-JC-141167.
119. Lin, W. and J. Wagoner (2001). "Temperature as a Diagnostic for the Drift Scale Test." High-Level Radioactive Conference, Las Vegas, NV, Apr. 29–May 3, 2001, UCRL-JC-141166.
120. Lomov, I., T. Antoun and L. Glenn (2001). "Explosion in the Granite Field: Hardening and Softening Behavior in Rocks." 12th American Physical Society (APS) Topical Group Conference on Shock Compression of Condensed Matter B SCCM 01, Atlanta, GA, June 24-29, 2001, UCRL-JC-144354-REV-1.
121. Lu, C.M., D. Burton, R. Fitzgerald, J. Vogel, B. Buchholz, L. Deftos and D. Herold (2001). "Application of a 14C-Labeled Antibody in a Two-site Immunoassay using Accelerator Mass Spectrometry." 2001 Academy of Clinical Laboratory Physicians and Scientists Meeting, Seattle, WA, June 14-16, 2001, UCRL-JC-142852-Abs.
122. Lu, S. (2001). "Seismic Evaluation Procedure for Glove Boxes at U.S. Department of Energy Facilities." 2001 American Society of Mechanical Engineers Pressure Vessel and Piping Conference, Hyatt Regency, Atlanta, GA, June 7, 2001, UCRL-JC-144054.
123. Lu, S. (2001). "Hydrogen Induced Cracking in titanium Drip shield of High-Level Waste repository." 2001 American Society of Mechanical Engineers Pressure Vessel and Piping Conference, Atlanta, June 1, 2001, UCRL-JC-143999.

124. Lutz, M.J., K. Caldeira and R.B. Dunbar (2001). "Regional and Seasonal Variability in the Vertical Flux of Particulate Organic Carbon in the Ocean Interior." AGU 2001 Fall Meeting, San Francisco, December 2001, UCRL-JC-145421-Abs.
125. Marchetti, A.A., T.A. Brown, T.F. Hamilton and J.P. Knezovich (2001). "Plutonium Determination by Accelerator Mass Spectrometry." Symposium on International Safeguards, Verification, and Nuclear Material Security, Vienna, Austria, Oct. 26–Nov. 1, 2001, UCRL-JC-145543.
126. Marian, J., B.D. Wirth, J.M. Perlado, G.R. Odette and T. Diaz de la Rubia (2001). "Atomistic Simulation of Vacancy and Self-Interstitial Diffusion in Fe-Cu Alloys." Material Research Society Symposium Proceedings, UCRL-JC-139405.
127. Martinez-Frias, J., S.M. Aceves, D.L. Flowers, J.R. Smith and R.W. Dibble (2001). "Equivalence Ratio-EGR Control of HCCI Engine Operation and the Potential for Transition to Spark-Ignited Operation." Society of Automotive Engineers International Fall Fuels & Lubricants Meeting & Exposition, San Antonio, TX, Sep. 24–27, 2001, UCRL-JC-144871.
128. Martinez-Frias, J., A. Pham and S. Aceves (2001). "Analysis of a High-Efficient Natural Gas-Assisted Steam Electrolyzer for Hydrogen Production." American Society of Mechanical Engineers, International Mechanical Engineering Congress and Exposition, New York, Nov. 11–16, 2001, UCRL-JC-44368.
129. Masiello, C.A., O.A. Chadwick, J. Harden, M.S. Torn and J.R. Sounthor (2001). "Soil Organic Radiocarbon and Mineralogy at Two Coastal California Sites." American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-146392.
130. Matyunin, Y.I., L.J. Jardine and S.V. Yudintsev (2001). "Immobilization of Uranium and Plutonium into Borobasalt, Pyroxene and Andradite Mineral-like Compositions." Waste Management 2001, Tucson, Arizona, Feb. 25–Mar. 1, 2001, UCRL-JC-142270.
131. Maxwell, R.M., C. Welty and A.F.B. Tompson (2001). "Streamline-Based Simulation of Virus Transport Resulting from Long Term Artificial Recharge in a Heterogeneous Aquifer." American Geophysical Union Meeting 2001 Fall, San Francisco, December 10, 2001, UCRL-JC-145275-ABS.
132. Maxwell, R.S., S.A. Carroll and R. Bourcier (2001). "Evaluation of silica: Water surface chemistry using NMR spectroscopy." Abstracts of paper of The American Chemical Society, UCRL-JC-136570.
133. Mayeda, K. (2001). "A Transportable & Stable Regional Magnitude Based on Coda Envelopes: Application to the Eastern Mediterranean Region." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143946 ABS.
134. Mayeda, K., A. Hofstetter, J. O'Boyle and T. Al-Yazjeen (2001). "A Transportable & Stable Regional Magnitude Based on Coda Envelopes." Seismological Society of America 96th Annual Meeting, San Francisco, Dec. 11–4, 2001, UCRL-JC-141977 ABS.
135. Mirin, A.A., R.H. Cohen, B.C. Curtis, W.P. Dannevik, A.M. Dimits, M.A. Duchaineau, D.E. Eliason, D.R. Schikore, S.E. Anderson, D.H. Porter, P.R. Woodward, L.J. Shieh and S.W. White (2001). "Accomplishing Very High Resolution Turbulence Simulations on the IBM-SP System." Tenth SIAM Conf. on Parallel Processing for Scientific Computing, Portsmouth, VA, March 2001, UCRL-JC-140051.

136. Mirin, A.A., G. Sugiyama, S. Chen, R.M. Hodur, T. Holt and J.M. Schmidt (2001). "Development and Performance of a Scalable Version of a Nonhydrostatic Atmospheric Model." DOD High Performance Computing Modernization Program Users Group Conf, Biloxi, MI, June 18–21, 2001, UCRL-JC-142797.
137. Miyashita, m., J.M. Presley, B.A. Buchholz, K.S. Lam, Y.M. Lee, J.S. Vogel and B.D. Hammock (2001). "Attomole Level Protein Sequencing by Edman Degradation Coupled with Accelerator Mass Spectrometry." *PNAS (Proceedings of the National Academy of Sciences of the United States of America)*, **98**(8):4403–4408, UCRL-JC-147256.
138. Moran, J.E., G.B. Hudson, B. Dooher, G. Eaton, R. Leif and M.L. Davisson (2001). "Accessing Groundwater Contamination Vulnerability at Public Water Supply Wells in California." American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145313 Abs.
139. Morris, J. and L. Glenn (2001). "Simulations of Underground Structures in Jointed Rock Using the Distinct Element Method." International Workshop Meshfree Methods of Partial Differential Equations, Bonn, Germany, Sept. 11–14, 2001, UCRL-PRES-145106.
140. Morris, J. and L. Glenn (2001). "Numerical Investigation into the Performance of a Rarefaction Shock Wave Cutter for Offshore Oil-Gas Platform Removal." 12 American Physical Society (APS) Topical Group Conference on Shock Compression of Condensed Matter B SCCM 01, Atlanta, GA, June 24-29, 2001, UCRL-JC-142023.
141. Morris, J., L. Glenn, S. Blair and F. Heuze (2001). "The Distinct Element Method - Application to Structures in Jointed Rock." International workshop Meshfree Methods of Partial Differential Equations, Bonn, Germany, Sept. 11–14, 2001, UCRL-JC-146404.
142. Myers, S. and C. Schultz (2001). "Statistical Characterization of Reference Event Accuracy." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141993.
143. Myers, S., K. Mayeda, W. Walter, C. Schultz, J. O'Boyle, A. Rodgers, S. Ruppert and A. Hofstetter (2001). "LLNL Calibration Program: Data Collection, Ground Truth Validation, and Regional Coda Magnitude." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-144307.
144. Myers, S. and C. Schultz (2001). "Evaluating Reference Events for Seismic Event Location." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143948 Abs.
145. Newmark, R.L., A.L. Ramirez and W.D. Daily (2001). "Monitoring Carbon Dioxide Sequestration Using Electrical Resistance Tomography (ERT): Sensitivity Studies." 1st National conference on Carbon Sequestration, Washington, DC, May 14, 2001, UCRL-JC-140527.
146. Newmark, R.L., A.L. Ramirez and W.D. Daily (2001). "Geophysical Imaging Using Electrical Resistance Tomography (ERT): controlled Laboratory Sensitivity Studies." American Geophysical Union 2001 Fall Meeting, San Francisco, Dec. 10, 2001, UCRL-JC-145243-ABS.
147. Newmark, R.L., W.D. Daily and A.L. Ramirez (2001). "Imaging production and Stimulation Using Steel Cased Boreholes." 2001 Pacific Section - American Association of

- Petroleum Geologists Convention, Universal City, CA, Apr. 9, 2001, UCRL-JC-141920-ABS.
148. Newsome, S.D., P.L. Koch, D. Gifford-Gonzalez and T.P. Guilderson (2001). "Holocene Shifts in Climate and Ecology on the Central California Coast." American Geophysical Union, San Francisco, Dec. 1–14, 2001, UCRL-JC-146365.
149. Nishiizumi, K. and M.W. Caffee (2001). "Exposure Histories of Lunar Meteorites Northwest Africa 032 and DHOFAR 081." Lunar and Planetary Conference, Houston, Mar. 12–16, 2001, UCRL-JC-145405.
150. Nishiizumi, K., M.W. Caffee, A.J.T. Jull and S.E. Klandrud (2001). "Exposure History of Sherogottites Dar Al Gani 476/489/670/735 and Sayh Al Uhaymir 005." 32nd Lunar and Planetary Conference, Houston, Mar. 12, 2001, UCRL-JC-145404.
151. Ognibene, T.J., G.S. Bench, T.A. Brown, G.F. Peaslee, J.R. Southon and J.S. Vogel (2001). "The LLNL AMS Spectrometer for Biochemical 14C Measurements." 222nd ACS National Meeting, Chicago, Aug. 26–30, 2001, UCRL-JC-147046.
152. Pasyanos, M. and W. Walter (2001). "At What Period Should we be Making Ms Measurements?" American Geophysical Union, Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145411-ABS.
153. Pasyanos, M., W. Walter, M. Flanagan and P. Goldstein (2001). "Construction and Validation of the MENAFSU Crust and Upper Mantle Model of the Middle East, North Africa, and Former Soviet Union." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141979 ABS.
154. Pasyanos, M. and W. Walter (2001). "Surface Wave Identification Research in Western Eurasia and North Africa." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143862.
155. Pham, A., B. Chung, J. Haslam, D. Lenz, E. See and R. Glass (2001). "Demonstration of High Power Density Planar Solid Oxide Fuel Cell Stacks." Seventh International Symposium, Electrochemical Society Proceedings, UCRL-JC-140761.
156. Rice, D.W., D.W. Layton and A.A. Marchetti (2001). "Comparison of Potential Ground and Surface Water Impacts Associated with the Increased use of Ethanol and Alkylates in Reformulated Gasoline." In Situ and On-Site Bioremediation, The Sixth International Symposium, San Diego, June 4–7, 2001, UCRL-JC-140584 Abs.
157. Roberts, J., A. Ramirez, B. Bonner and S. Carlson (2001). "Combining Laboratory and Field Data to Determine Saturation and Detect Fractures In a Heated Rock Mass." 2001 AGU Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145244.
158. Roberts, J.J. (2001). "Electrical Properties of Sand-Clay Mixtures Containing Trichloroethylene and Ethanol." Annual Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Las Vegas, NV, Feb. 10–14, 2002, UCRL-JC-144791.
159. Rodgers, A., M. Pasyanos, K. Mayeda, W. Walter and D. Harris (2001). "Regional Seismic Event Identification in the European Arctic." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143785 ABS.

160. Rosenberg, N.D., G.E. Gdowski and K.G. Knauss (2001). "Evaporation of J13 and UZ Pore Waters at Yucca Mountain." 2001 Int'l High-Level Radioactive Waste Management conference, Las Vegas, NV, Apr. 29, 2001, UCRL-JC-141235.
161. Rosenberg, N.D., G.E. Gdowski, K.G. Knauss and W.L. Bourcier (2001). "Evaporative Chemical Evolution of Natural Waters from Volcanic Terrains." Geological Society to America Meeting, Boston, Nov. 1, 2001, UCRL-JC-144966-ABS`.
162. Ruppert, S., J. O'Boyle, T. Hauk, D. Dodge and M. Firpo (2001). "LLNL Middle East, North Africa and Western Eurasia Knowledge Base." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143945 ABS.
163. Ryall, F., D. Dodge, S. Myers and C. Schultz (2001). "Analysis in Support of Regional Characterization." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143905.
164. Schultz, C., S. Myers, W. Hanley, M. Flanagan, J. Swenson, D. Dodge, M. Pasyanos and F. Ryall (2001). "Validation of Improvements in Seismic Locations Through Integration of Regionalized Models and Empirical Corrections." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143947.
165. Schultz, C., M. Flanagan, W. Walter, W. Hanley, S. Myers and J. Swenson (2001). "Calibrating Seismic Locators to Enhance International Monitoring of Nuclear Explosions." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141976 Abs.
166. Schultz, C.A., M.P. Flanagan, S.C. Myers, M.E. Pasyanos, J.L. Swenson, W. Hanley, F. Ryall and D. Dodge (2001). "LLNL Seismic Locations: Validating Improvement Through Integration of Regionalized Models and Empirical Corrections." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-144909.
167. Schwartz, D.P., G.G. Seitz, J.J. Lienkaemper, T.E. Dawson, S. Hecker, L. William and K. Kelson (2001). "The Bay Area Earthquake Cycle: A Paleoseismic Perspective." American Geophysical Union Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-146394.
168. Shinn, J.H. and F.J. Gouveia (2001). "Applications of Computational Fluid Dynamics Simulations in Urban Environments and Experiments Designed to Aid the Development and Evaluation of these Models." 2001 International Symposium on Environmental Hydraulics, Tempe, AZ, Dec. 5–7, 201, UCRL-JC-142263.
169. Sperber, K.R., S. Gualdi, W. Li and J.S. Slingo (2001). "Madden-Julian Variability in Coupled Models." The 26th Annual Climate Diagnostics and Prediction Workshop, La Jolla, CA, Oct. 22–26, 2001, UCRL-LC-145663.
170. Sperber, K.R., J.S. Slingo and H. Annamalai (2001). "Predictability and the Relationship Between Subseasonal and Interannual Variability During the Asian Summer Monsoon." Conference on Climate Variability and Land-surface Processes: Physical Interactions and Regional Impacts, Trieste, Italy, June 11–14, 2001, UCRL-JC-133993 Abs.
171. Steefel, C.I., C.S. A., P. Zhao and P.C. Lichtner (2001). "Cesium Migration in Hanford Sediments." 211th American Chemical Society (ACS) National Meeting, San Diego, Apr. 1–5, 2001, UCRL-JC-142731.

172. Steefel, C.I., S.A. Carroll, S.B. Yabusaki and P.C. Lichtner (2001). "Evaluation of the Field Exchange Capacity of Hanford Sediments with Implications for ^{137}Cs Migration." Eleventh Annual V. M. Goldschmidt Conference, The Homestead, Hot Springs, VA, May 20–24, 2001, UCRL-JC-142754 Abs.
173. Stout, R.B. (2001). "Non-Equilibrium Thermodynamic Dissolution Theory for Multi-Component Solid/Liquid Surfaces Involving Surface Adsorption and Radiolysis Kinetics." 8th International conference on Environmental Management, Bruges, Belgium, Sept. 30, 2001, UCRL-JC-137871.
174. Stout, R.B. (2001). "Hydride Precipitation Crack Propagation in Zircaloy Cladding During a Decreasing Temperature History." International Conference on Nuclear Engineering, Nice, France, Apr. 8, 2001, UCRL-JC-141061.
175. Stout, R.B. (2001). "Statistical Lattice Mechanics Developed for the Deformation, Kinematics, and Thermodynamic Analyses and Design of Nanoscale Sensors." Symposium on Solid Mechanics at Small Scales for Emerging Technologies, New York, Apr. 2, 2001, UCRL-JC-143482-EXT-ABS.
176. Stout, R.B. (2001). "Liquid Thermodynamics and Liquid Shear Turbulence Derived from Discontinuum Mechanics." Thermodynamics Symposium, New York, Nov. 11, 2001, UCRL-JC-143684-DR.
177. Stout, R.B., E.J. Kansa, R.J. Shaffer and H.C. Weed (2001). "Decontamination of U-metal Surface by an Oxidation Etching System." International Conference on Nuclear Engineering, Nice, France, Apr. 8, 2001, UCRL-JC-141063 Abs.
178. Sugiyama, G., R. Calhoun, S. Chin, M. Leach, R.L. Lee, J.M. Leone, Jr. and J. Shinn (2001). "LLNL Urban Modeling." Fifth Annual George Mason University Transport and Dispersion Modeling Workshop, Fairfax, VA, July 18–19, 2001, UCRL-JC-144114-Abs.
179. Sugiyama, G., D. Larson, J. Nasstrom, K. Foster, G. Bieberbach, S. Bradley, J. Heagy, S. Warner and N. Platt (2001). "Controlled Comparisons of HPAC and NARAC." Fifth Annual GMU Transport and Dispersion Modeling Workshop, Fairfax, VA, July 2001, UCRL-JC-144244 Abs.
180. Sugiyama, G., S. Warner, N. Platt, J. Heagy, S. Bradley, G. Bieberbach, J. Nasstrom, K. Foster and D. Larson (2001). "Model Intercomparison with User-Oriented Measures of Effectiveness." Fourth Annual GMU Transport and Dispersion Modeling Workshop, Fairfax, VA, July 2001, UCRL-JC-144243-ABS.
181. Sugiyama, G., J.S. Nasstrom and J.E. Tull (2001). "CBNP M&P Thrust Area—CB-NARAC Operational Systems Integration." Chemical and Biological National Program (CBNP) Summer Meeting, Arlington, VA, July 24–26, 2001, UCRL-JC-144462-ABS.
182. Summers, T.S.E., R.B. Rebak, T.A. Palmer and P. Crook (2001). "Influence of Thermal Aging on the Mechanical and Corrosion Properties of GTAW Welds of Alloy N06022." 2001 MRS Fall Meeting, Boston, November 2001,
183. Sun, Y. and T.A. Buscheck (2001). "Newly Derived Solutions for Radionuclide Transport in a Fractured Porous Medium." American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145276-ABS.
184. Teranes, J.L., C.D. Charles, C. Wittkop and T.P. Guilderson (2001). "Holocene Climate Variability Documented in Lake Sediment Oxygen Isotope Records in Michigan (USA)."

American Geophysical Union Meeting, San Francisco, Dec. 10-14, 2001, UCRL-JC-146364.

185. Thompson, S.L. and B. Govindasamy (2001). "Simulation of Interannual Variability in the Terrestrial Carbon Cycle." American Geophysical Union, San Francisco, Dec. 10–14, 2001, UCRL-JC-145279-ABS.
186. Thompson, F.B., S.F. Carle, D.K. Smith and G.B. Hudson (2001). "Radionuclide Migration Experiments Related to an Underground Nuclear Test: II Modeling Studies." 3rd International Conference, Nuclear and Radiation Physics, Almaty, Kazakhstan, June 4, 2001, UCRL-JC-143629-ABS-PT-2.
187. Toffelmier, D., W. Dufrane, C. Aracne-Ruddle, B.P. Bonner, P.A. Berge, B. Viani and K. Knauss (2001). "Load Dependence of Ultrasonic Velocities for Sand and Sand/Clay Mixtures." 2001 AGU Fall Meeting, San Francisco, Dec. 10–14, 2001, UCRL-JC-145264.
188. Tompson, A., M.L. Davisson, R.M. Maxwell, G.B. Hudson, S.F. Carle, N.D. Rosenberg and C. Welty (2001). "On the Fate of Artificial Recharge in a Coastal Aquifer." The First International Conference on Salt Water Intrusion and Coastal Aquifers-Monitoring, Modeling, and Management, Essaouira, Morocco, Apr. 18–25, 2001, UCRL-JC-140659 Abs.
189. Tompson, A.F.B., D.K. Smith, G.B. Hudson, R.M. Maxwell and S.F. Carle (2001). "Analysis of Radionuclide Migration through a 200-m Vadose Zone Following a 16-year Infiltration Event." American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145274-ABS.
190. Tompson, A.F.B., D. Zhang and W.E. Soll (2001). "Analysis of Local Dispersion Phenomena in Porous Media: Some Insights Derived from Pore-Scale Flow Simulations." American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145273-ABS.
191. Viani, B.E. (2001). "Model Predictions of Chemically Controlled Slow Crack Growth with Application to Mechanical Effects in Geothermal Environments." Geothermal Resource Council 2001 Annual Meeting, San Diego, Aug. 26, 2001, UCRL-JC-143427.
192. Vincent, P. (2001). "Aseismic Slip Events Along the Southern San Andreas Fault System Captured by Radar Interferometry." 3rd Conference on Tectonic problems of the San Andreas Fault System, Stanford University, Stanford, CA, December 2000, UCRL-JC-145561.
193. Vincent, P. (2001). "Using Satellite Radar Interferometry (InSAR) to Detect and Characterize HDBTs." MITRE Nonproliferation and Arms Control Conference: Research and Development on Detecting, Characterizing and Defeating Underground Facilities, McLean, VA, Apr. 3–4, 2001, UCRL-JC-142139-ABS.
194. Vincent, P., W. Walter, A. Rodgers and S. Larsen (2001). "Using InSAR and Broadband Seismic Data to Model and Locate the March 14, 1998 Mw 6.6 Iran Earthquake." 2001 AGU Fall Meeting, San Francisco, Dec. 10–14, 2001,
195. Vogel, J.S., G.A. Keating and B.A. Buchholz (2001). "Toxic Effects of Chemical Mixtures at Relevant Exposures: Minimizing Analyses." American Chemical Society 220th Meeting, Washington, DC, August 2000, UCRL-JC-147048.

196. Vogel, J.S., T. Ognibene, Y. Lin, S.R. Dueker, A.J. Clifford and B.A. Buchholz (2001). "Quantification of Human Metabolism and Mass Balance of Vitamins at Physiologic Exposures." ACS 220th Meeting, Washington, DC, August 2001, UCRL-JC-147047.
197. Walter, W., A. Rodgers, K. Mayeda and A. Sicherman (2001). "The Role of Detection in Regional Seismic Event Discrimination Examples from NTS." Seismological Society of America 96th Annual Meeting, San Francisco, Apr. 18–20, 2001, UCRL-JC-141978 ABS.
198. Walter, W., A. Rodgers, K. Mayeda, A. Sicherman and S.-L. Taylor (2001). "Regional Phase Detection and Discrimination Using Updated Magnitude and Distance Amplitude Corrections (MDAC2): Examples from NTS." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-143875.
199. Walter, W., A. Rodgers, M. Pasyanos, K. Mayeda, A. Sicherman and D. Harris (2001). "LLNL Identification Program: Regional Body-Wave Correction Surfaces and Surface-Wave Tomography Models to Improve Discrimination." 23rd DoD/DOE Seismic Research Review, Jackson Hole, WY, Oct. 2–5, 2001, UCRL-JC-144345 ABS.
200. Welten, K.C., K. Nishiizumi, M.W. Caffee, J. Masarik and R. Wieler (2001). "A Complex Exposure History of the Gold Basin L4-Chondrite Shower From Cosmogenic Radionuclides and Nobel Gases." Lunar and Planetary Conference, Houston, Mar. 12–16, 2001, UCRL-JC-145406.
201. Wickett, M.E., K. Caldeira and P.B. Duffy (2001). "Increased Resolution in a Coarse Resolution Global Ocean GCM: Effects on Equilibrium, CFC, and Sequestration Solutions." AGU Ocean Sciences, Hawaii, Feb. 11–15, 2002, UCRL-JC-146133-ABS.
202. Wildenschild, D., N.D. Rosenberg and D.G. Ruddle (2001). "The Effect of Vapor Diffusion and Material Microstructural Properties of Capillary Barrier Design and Performance." American Geophysical Union Meeting 2001 Fall, San Francisco, Dec. 10, 2001, UCRL-JC-145369-ABS.
203. Wirth, B.D., G.R. Odette, P. Asoka-Kumar, R.H. Howell and P.A. Sterne (2001). "Characterization of Nanostructural Features in Irradiated Reactor Pressure Vessel Model Alloys." Proceedings of the 10th International Symposium on Environmental Degradation of Materials in Light Water Reactors, National Association of Corrosion Engineers, UCRL-JC-145544.
204. Wirth, B.D., P. Asoka-Kumar, R.H. Howell, G.R. Odette and P.A. Sterne (2001). "Positron Annihilation Spectroscopy and Small Angle Neutron Scattering Characterization of Nanostructural Features in Irradiated Fe-Cu-Mn Alloys." Material Research Society Symposium Proceedings, UCRL-JC-139402.
205. Wirth, B.D., V.V. Bulatov and T. Diaz de la Rubia (2001). "Atomistic Simulation of Dislocation-Defect Interactions in Cu." Material Research Society Symposium Proceedings, UCRL-JC-134732.
206. Wolfe, T.D., W.L. Bourcier and T.F. Speth (2001). "Spreadsheet Based Scaling Calculations and Membrane Performance." 2001 MEMBRANES Technology Conference, San Antonio, TX, Mar. 3, 2001, UCRL-JC-143230.
207. Woodward, P.R., D.H. Porter, I. Sytine, S.E. Anderson, A.A. Mirin, B.C. Curtis, W.P. Dannevick, A.M. Dimits, D.E. Eliason, K.-H. Winkler and S.W. Hodson (2001). "Very High Resolution Simulations of Compressible, Turbulent Flows." Proc. Fourth Universidad

- Nacional Autonoma de Mexico Supercomputing Conference, Mexico City, Mexico, 2001, UCRL-JC-143626.
208. Woodward, C.S., K.E. Grant and R. Maxwell (2001). "Applications of Sensitivity Analysis to Uncertainty Quantification for Variably Saturated Flow." XIV International Conference on Computational Methods in Water Resources,, Amsterdam, The Netherlands, June 2002, UCRL-JC-146976.
209. Xie, S., R.T. Cederwall, J. Yio and K.-M. Xu (2001). "Intercomparison and Evaluation of Cumulus Parameterizations under Summertime Midlatitude Continental Conditions." Eleventh Atmospheric Radiation Measurement (ARM) Science Team Meeting, Mar. 12–16, 2001, UCRL-JC-142040 Rev. 1.
210. Zavarin, M. (2001). "Simulating Reactive Transport of radionuclides at the NTS Using Non-Electrostatic Surface Complexation." American Chemical Society Meeting, San Diego, CA, Apr. 1–5, 2001, UCRL-JC-145408-ABS.
211. Zhang, Y., J.E. Penner, C.C. Chuang, B.D. Santer and K. Taylor (2001). "Changes In The Vertical Temperature Structure Associated With Carbonaceous Aerosols." Proceedings of the 81 AMS Annual Meeting.
212. Zhang, M.H., R.T. Cederwall, S.C. Xie and J.J. Yio (2001). "Status of Variational Objective Analysis for ARM IOPs: Update and New Challenges." Tenth ARM Science Team Meeting, San Antonio, Texas, Mar. 13–17, 2001, UCRL-JC-145146-ABS.